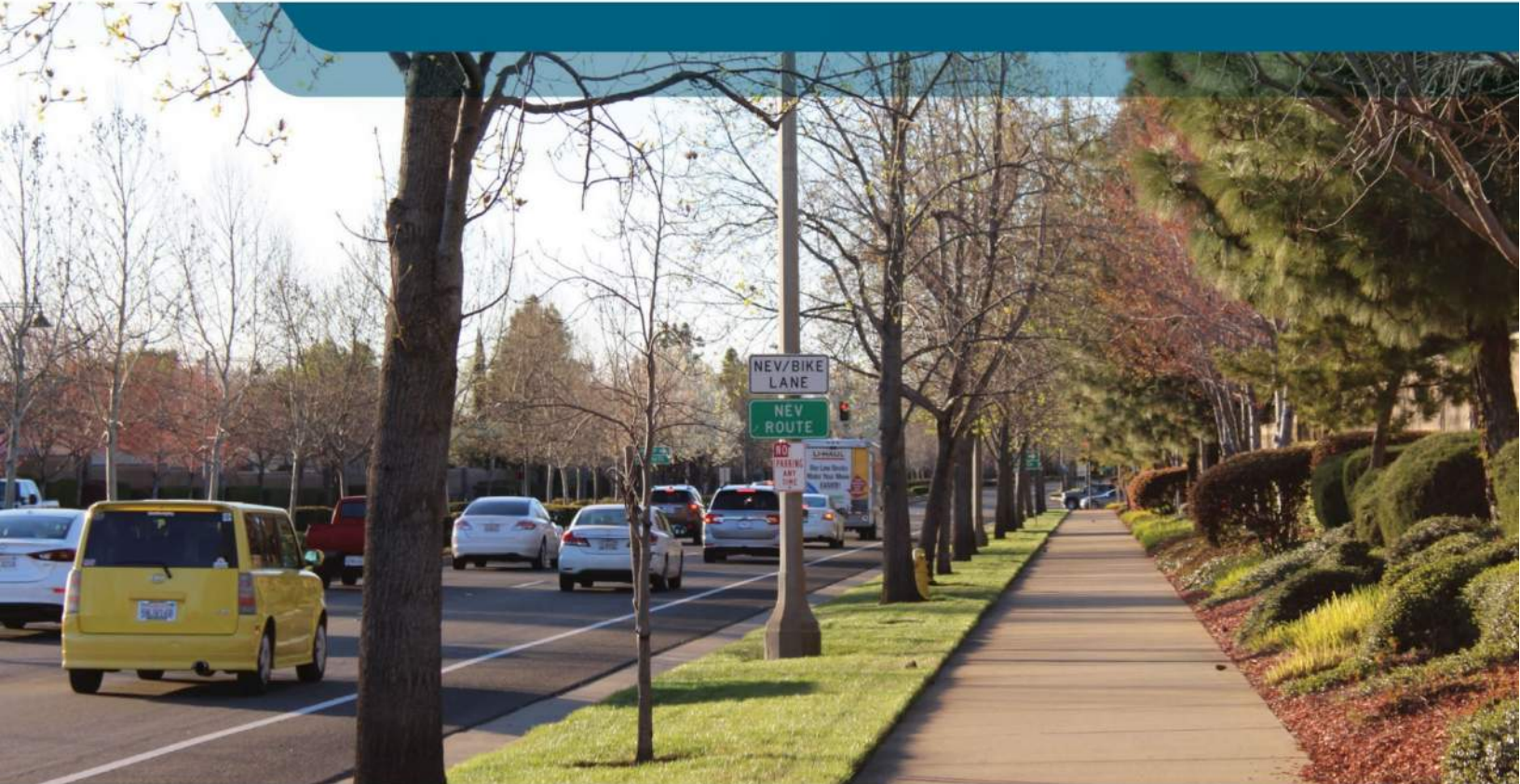




Neighborhood Electric Vehicle (NEV) and Golf Cart Master Plan Update





Neighborhood Electric Vehicle (NEV) and Golf Cart Master Plan Update

City of Lincoln,
California

March 2023

Prepared for:

City of Lincoln

Prepared by:

Kimley»»Horn

555 Capitol Mall, Suite 300
Sacramento, California 95814

Phone: (916) 858-5800



TABLE OF CONTENTS

INTRODUCTION..... 1
 Overview and Purpose 1
 Project Area 1

LINCOLN’S HISTORY WITH NEVS AND GOLF CARTS 3

BENEFITS OF NEVS AND GOLF CARTS..... 4

VEHICLE DEFINITIONS AND REQUIREMENTS 4
 NEV Definitions and Vehicle Requirements..... 4
 Golf Cart Definitions and Vehicle Requirements 5

CIRCULATION REQUIREMENTS..... 6
 NEV Circulation Standards 7
 Golf Cart Circulation Standards..... 8

EXISTING CONDITIONS10

PROPOSED PROEJCTS12
 NEVs..... 15
 Golf Carts 16

COMMUNITY INVOLVEMENT 20

CONCLUSIONS 20

APPENDICES
AB 2353 and AB 2963 Language Appendix A
California Vehicle Code Language Appendix B
Permit Application Appendix C
Signing and Striping Standards..... Appendix D
Parking Standards..... Appendix E
CAD Exhibits Appendix F
Opinions of Probable Construction Costs Appendix G

LIST OF TABLES

Table 1 – NEV Plan Elements 2
 Table 2 – Golf Cart Plan Elements 2
 Table 3 – NEV and Golf Cart Project Summary..... 14
 Table 4 – Golf Cart Project Summary..... 18

LIST OF FIGURES

Figure 1 – City of Lincoln Overview 3
 Figure 2 – Speed Limits and Lane Requirements 6
 Figure 3 – Existing NEV and Golf Cart Facilities 11
 Figure 4 – Existing Speed Limits..... 12
 Figure 5 – Existing Golf Cart Route Conditions..... 13
 Figure 6 – Proposed NEV and Golf Cart Project Locations..... 14
 Figure 7 – Proposed NEV Signs in Downtown 17
 Figure 8 – Proposed Golf Cart Projects..... 18



INTRODUCTION

Overview and Purpose

In 2006 the City of Lincoln (City) established a Neighborhood Electric Vehicle (NEV) Plan and a separate Twelve Bridges Golf Cart Transportation Plan. The City is unique in that it was the first to establish a NEV Plan, and one of the only cities in the State of California to have a golf cart master plan.

This NEV/Golf Cart Master Plan Update combines both plans into a single, comprehensive document intended to provide a framework for the City to follow in regard to maintenance and expansion of the respective infrastructure networks. This document also updates the City's NEV and Golf Cart network and provides a list of potential projects and their associated costs to assist with prioritization. The overarching goal of the City's investment in this update is to provide a safe and connected NEV and Golf Cart network within the City of Lincoln.

In addition to serving as a planning guide for the City, this report is also meant to provide guidance to the City's residents. This report provides information on the difference between NEVs and Golf Carts and where they are allowed to travel. This explanation is accomplished by exhibits showing where NEVs and Golf Carts are road-legal, where they are allowed to cross major roads, and where parking spaces are currently available.

This NEV/Golf Cart Master Plan Update accomplishes the following:

- Updates required information elements of the NEV Plan and the Golf Cart Plan
- Updates the City's existing NEV network to include street and NEV route improvements completed since the previous plan was published in 2006
- Determines the efficacy of the 2006 NEV Plan and 2006 Golf Cart Plan and revises these recommendations based on input from the public, combined with a comprehensive assessment of NEV and Golf Cart connectivity relative to existing and future development patterns
- Establishes a future NEV/Golf Cart network that connects all areas of significance in the City with facilities and routes that have been lacking or will be required with new developments

The NEV/Golf Cart Master Plan Update addresses elements required under Assembly Bill 2353 (2004) and the California Streets and Highways Code. These requirements are shown in **Table 1** and **Table 2** in the order in which they are presented in this report.

Project Area

The City of Lincoln, California, is located in Placer County, approximately 10 miles north of the City of Roseville and 25 miles north/northeast of the City of Sacramento. The City is approximately 24 square miles in area; however, this plan area includes the City limits and its "sphere of influence", including Village 1 and Village 7 and other Special Use Districts in the City's General Plan (see **Figure 1**).



Table 1 – NEV Plan Elements

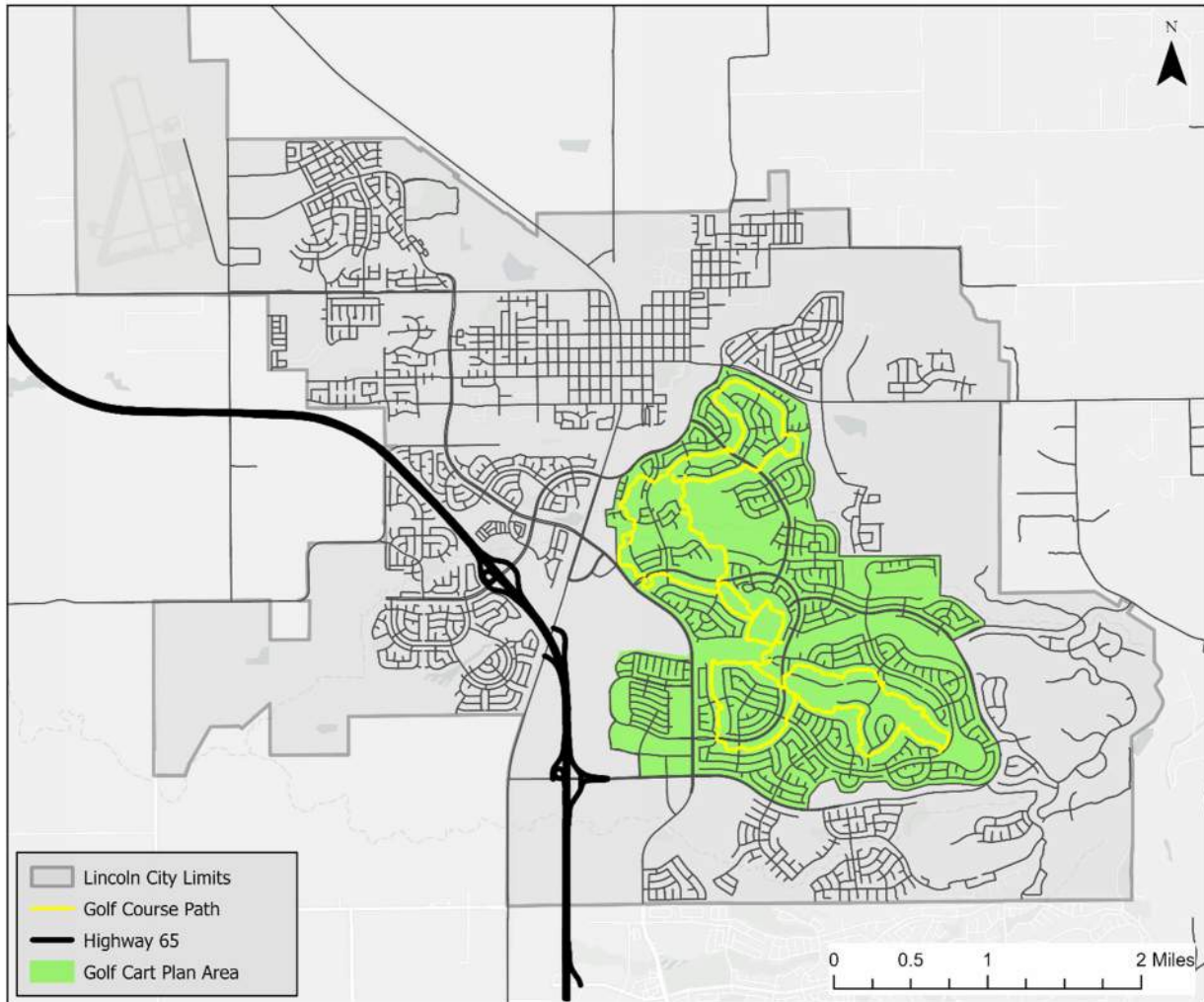
Required NEV Plan Element		Report Reference Page
A.	Minimum design/safety criteria for NEVs	4
B.	Transportation interfacing	6
C.	Minimum general design criteria for NEV routes and lanes	7
D.	Provisions for NEV electrical charging stations	8
E.	Provision for NEV related facilities, including special access points and NEV crossings	8
F.	Provision for NEV parking facilities at locations including community commercial centers, golf courses, public areas, parks, etc.	8
G.	Route selection	12
H.	Flexibility and coordination with long-range transportation planning	15
I.	Citizens and community involvement in planning	20
J.	Provision for special paving, road markings, signage and striping for NEV lanes, road crossings, parking, and circulation	Appendix D
K.	Uniform specifications and symbols	Appendix D

Table 2 – Golf Cart Plan Elements

Required Golf Cart Plan Element		Report Reference Page
A.	Minimum design/safety criteria for golf carts	5
B.	Defined permit process	6
C.	Minimum safety criteria for golf cart operators	6
D.	Restrictions limiting the operation of golf carts to plan areas	6
E.	Infraction repercussions	6
F.	Transportation interfacing	6
G.	Minimum general design criteria for golf cart routes and lanes	8
H.	Provision for golf cart parking facilities at locations including community commercial centers, golf courses, public areas, parks, etc.	9
I.	Provisions for golf cart electrical charging stations	9
J.	Route selection	12
K.	Provision for golf cart related facilities, including special access points and NEV crossings	16
L.	Flexibility and coordination with long-range transportation planning	16
M.	Citizens and community involvement in planning	20
N.	Provision for special paving, road markings, signage and striping for golf cart lanes, road crossings, parking, and circulation	Appendix D
O.	Uniform specifications and symbols	Appendix D



Figure 1 – City of Lincoln Overview



LINCOLN’S HISTORY WITH NEVS AND GOLF CARTS

In 2004 the State of California passed Assembly Bill 2353 (AB 2353), authoring the City of Lincoln to establish a Neighborhood Electric Vehicle (NEV) transportation plan. NEVs continue to be an increasingly popular mode of transportation for shorter trips and provide numerous benefits to communities. However, the use of NEVs is restricted by the California Vehicle Code (CVC), which only allows NEVs on streets with speed limits of 35 mph or less. To allow NEVs to utilize the City’s roadway network more fully, the City initiated the creation of AB 2353. This bill ultimately created provisions for the use of NEV Lanes on roads with speed limits greater than 35 mph, assuming that standard design criteria were followed.

Following the 2004 adoption of AB 2353 by the California State Legislature, the City published its *NEV Transportation Plan* in 2006. Over the following years, numerous projects that were proposed in the plan were implemented. AB 2353 required the City to submit an evaluation report to the Legislature before January 1, 2008, describing the general effectiveness of the NEV plan and whether it should be terminated or continued. In 2008, AB 2963 was adopted, pushing back the due date of the report to January 1, 2012, and giving the City additional time to implement the projects described in the existing plan. Subsequently, the City submitted its evaluation report on January 1, 2011, stating that the plan had been generally successful and that there would be numerous benefits to expanding the provisions of AB



2963 statewide. NEVs are currently permitted to use the City's transportation network and, as a result, a precedent has been set for residents and users of the broad transportation system. AB 2353 and 2963 are included for reference in **Appendix A**.

The City has followed a thoughtful and well-researched process to create a NEV Plan under the supervision of the State Legislature. This background has prepared the City to manage its NEV facilities in an ongoing manner, including maintenance and the logical expansion of NEV routes. The City is now seeking to refresh its existing NEV Plan and build upon the existing network in a manner consistent with existing policies and plans. This step is necessary, given additional growth within the City since 2006 and changes to speed limits that may affect the safe use of NEVs.

The City is also seeking to update the 2006 *Twelve Bridges Golf Cart Transportation Plan*. Golf carts are allowed to drive on paths within a golf course, but are not considered street-legal outside of the golf course. As described in the California Streets and Highways Code, a golf cart plan is required for permitted golf carts to drive on public roads outside of a golf course (see **Appendix B**). The 2006 Golf Cart Plan defined the plan area as the Del Webb/Twelve Bridges community and set design criteria for golf cart facilities that extend beyond the golf course. This update serves as an evaluation of the existing Golf Cart Plan and provides updated policies and projects to best serve the needs of the community.

Together, these updated NEV and Golf Cart Plans will provide a summary of existing vehicle and infrastructure requirements, a roadmap for future project locations, and will serve as a consolidated resource for residents to know where they can drive the respective vehicles.

BENEFITS OF NEVS AND GOLF CARTS

There are numerous benefits to the use of NEVs and golf carts for a variety of mobility needs. NEVs are often a smart choice for shorter trips within the City as they can travel along many of the routes connecting residential communities and destination commercial centers. Residents traveling to the store or for recreational purposes can save on gas and can often charge their vehicles at their destination of choice. NEVs produce no greenhouse gas (GHG) emissions and do not pollute the air, making them a much more environmentally friendly option than fossil fuel powered vehicles.

Golf carts provide similar benefits to NEVs. Older residents with more restricted mobility can use golf carts to travel within the golf course itself, and within the larger golf course community. Golf carts are also electric, providing benefits to air quality and reduced GHG emissions. There are also potential safety benefits to the use of golf carts, given that they operate at lower speeds.

VEHICLE DEFINITIONS AND REQUIREMENTS

NEV Definitions and Vehicle Requirements

- Neighborhood electric vehicles are classified Federally as Low Speed Vehicles (LSVs). According to the Federal Motor Vehicle Safety Standards 49 CFR 571.3(b), LSVs are defined as being 4-wheeled vehicles with a top speed attainable in 1 mile of more than 20-mph but not greater than 25-mph, and having a Gross Vehicle Weight Rating (GVWR) less than 3,000 lbs. The following safety features are required for LSVs:
 - a. Headlamps
 - b. Front and rear turn signal lamps
 - c. Taillamps
 - d. Stop lamps



- e. Reflex reflectors: one red on each side as far to the rear as practicable, and one red on the rear
 - f. An exterior mirror mounted on the driver's side of the vehicle and either an exterior mirror mounted on the passenger's side of the vehicle or an interior mirror
 - g. A parking brake
 - h. A windshield that conforms to the Federal motor vehicle safety standard on glazing materials (49 CFR 571.205)
 - i. A VIN that conforms to the requirements of part 565 Vehicle Identification Number of this chapter
 - j. A Type 1 or Type 2 seat belt assembly conforming to Sec. 571.209 of this part, Federal Motor Vehicle Safety Standard No. 209, Seat belt assemblies installed at each designated seating position
 - k. Low-speed vehicles shall comply with the rear visibility requirements specified in paragraphs S6.2 of FMVSS No. 111
 - l. An alert sound as required by §571.141
- The classification "NEV" is defined by the State of California in AB 2353 Section 1, Division 2.5, Chapter 7. According to AB 2353, NEVs must have 4 wheels, a maximum speed greater than 20-mph, but not greater than 25, and a GVWR of less than 3000 lbs. AB 2353 states that LSVs are not golf carts, except when operated pursuant to Section 21115 or 21115.1. AB 2353 also provides for NEVs to use state highways or any crossing of the highway, subject to approval of the State Department of Transportation (Caltrans). NEVs must meet all of the safety requirements with which LSVs comply
 - A driver's license is required to drive an NEV on public roads
 - Consistent with the National Highway Traffic Safety Administration (NHTSA) requirements, all NEVs must be equipped with:
 - a. Seat belts (lap only, or lap and shoulder)
 - b. Brake lights
 - c. Rear lights
 - d. Headlights
 - e. Mirrors, one of the following selection: (1) left side and right-side mirrors, (2) left-side and rear-view mirrors, or (3) multi-directional cross bar window
 - f. Windshield
 - g. Horn
 - h. Front and rear turn signal indicators
 - i. Rear red-reflectors
 - j. Parking brake
 - k. Covered passenger compartment

Golf Cart Definitions and Vehicle Requirements

- The California Streets and Highway Code defines a golf cart as "a motor vehicle having not less than three wheels in contact with the ground and unladen weight less than 1,300 pounds which is designed to be and is operated at not more than 25 miles per hour and is designated to carry golf equipment and not more than two persons, including the driver"
- Any person operating a golf cart in violation of the rules outlined in the golf cart plan is guilty of an infraction punishable by a fine

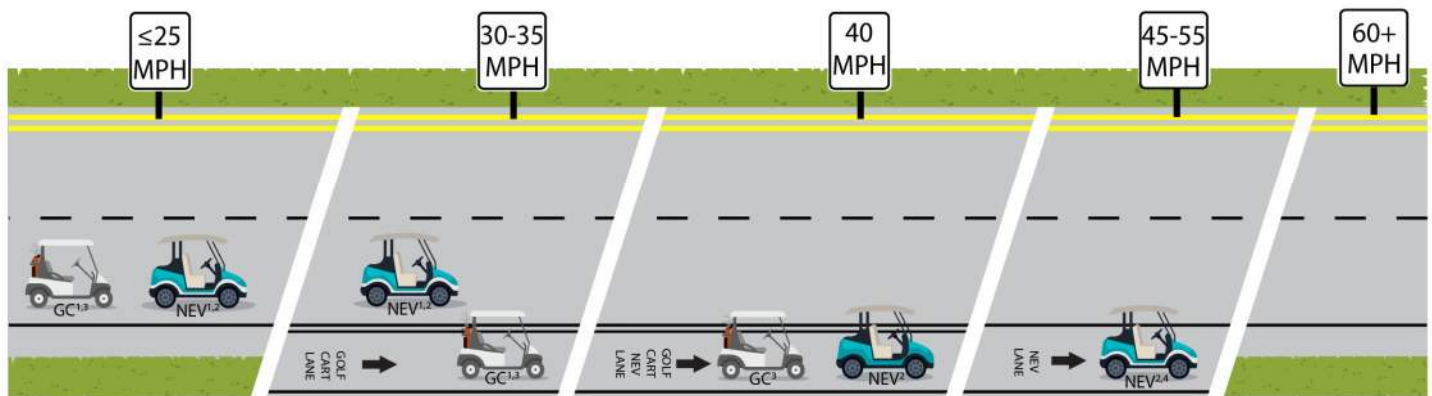


- Consistent with the existing Golf Cart Plan requirements, golf carts must be equipped and operated with the following to drive on roads outside of the golf course:
 - a. Brake lights conforming to CVC 24603
 - b. Front and rear turn signal indicator lights, conforming to CVC 24952 and 24953
 - c. Full rear-view mirror mounted in a continuous multi-section array across the top of the passenger compartment CVC 26709
 - d. Single beam headlamps, conforming to CVC 24400
 - e. Parking brake CVC 26450
 - f. Seatbelts for both driver and passenger, in two-point (i.e. lap) mounting, conforming to 49-CFR-571.209 and 571.210
 - g. Safely equipped or properly loaded to conform to CVC Section 24002
- Golf carts that will only be operated on the golf course and not on adjacent streets are not required to meet the above requirements. Any golf carts that are modified to increase their top speed or intended for use on public roads must meet these requirements though.
- A driver's license is required to drive a golf cart on public roads. Golf carts operated on public streets must also have a permit issued by the Lincoln Police Department (see sample application in **Appendix C**. Applications include resident information, a checklist of safety requirements, proof of insurance, and a processing fee. Permits and inspection certificates are valid for two years. For the purposes of this report, a speed modified golf cart is the same as a permitted golf cart.

CIRCULATION REQUIREMENTS

As previously discussed, NEVs and Golf Carts are governed by their own requirements specifying the facilities on which and how they can legally operate. **Figure 2** summarizes the various conditions for each vehicle depending on the subject roadway's posted speed limit.

Figure 2 – Speed Limits and Lane Requirements



Note: Golf Carts are limited to the extents of the Golf Cart Plan Area and must have a permit from City PD

¹CVC 21260 Restricts Low Speed Vehicles to roads with Design Speeds of 35 or less

²See AB 2353 for NEV Lane Design Speed Criteria

³See Twelve Bridges Golf Cart Plan for Golf Cart Lane Design Speed Criteria

⁴NEV Lanes are allowed on roads with speed limits greater than 45 mph only with City Engineer approval

Generally speaking, golf carts are restricted to lower speed roadways and, when legally traveling on a higher speed facility, they are restricted to a designated golf cart lane. Conversely, because NEVs have a higher speed and are more physically reinforced, these vehicles can travel with traffic at higher speeds and have a higher maximum speed limit allowed with a designated NEV lane. The requirements summarized in **Figure 2** serve as the framework for the evaluation and facility modifications recommended as part of this consolidated plan update.



NEV Circulation Standards

NEV Routes

AB 2353 was approved in 2004, amending the California Vehicle Code (Chapter 7, Section 1963) and established guidance for NEVs and their supporting infrastructure. Per this amendment, NEV routes are classified as Class I, Class II, and Class III. The following section describes the required geometry, pavement markings, and signage for the different NEV facilities.

1. Class I NEV Routes
 - a. Class I NEV routes provide separate right-of-way for NEV use. These facilities are shared with bikes, pedestrians, and under certain circumstances, golf carts. Class I facilities can be divided into two types: one-way paths and two-way paths.
 - i. One-way NEV paths have a minimum width of 10-feet (eight-feet wide path with a one-foot shoulder on each side).
 - ii. Two-way NEV paths have a minimum width of 16-feet (14-foot-wide path with one-foot shoulders on each side). The path may be reduced to 12-feet at the discretion of the City engineer. The extra width is required in order to accommodate vehicles traveling in both directions.
 - b. Proposed Modification: the existing NEV Plan does not have signage recommendations for Class I NEV routes. NEV operators need to know when a path is one-way, so that head-on conflicts do not arise. Likewise, bikes and pedestrians need to know if they should expect to be sharing the path with NEVs. Because they are electric, NEVs are quiet and may catch other path users by surprise. It is the recommendation of this plan that Class I NEV routes be appropriately signed. See **Appendix D** for an example sign.
2. Class II NEV Routes
 - a. Class II NEV routes provide a separate striped lane adjacent to through traffic lanes on roadways with speed limits of 55-mph or less (AB 2353). Class II NEV facilities are shared between NEVs and bikes, and will henceforth be referred to as NEV/Bike Lanes in this report. NEV/Bike Lanes should be striped to be eight-feet wide, though seven-feet wide lanes are permissible in some instances at the discretion of the City engineer. When necessary, NEV/Bike Lanes may be reduced to six-feet wide, but only with the approval of the City engineer. Roads with speed limits of greater than 35 mph and less than or equal to 55 mph must have NEV/Bike Lanes for NEVs to travel on the road.

The previous NEV Master Plan set the road design speed for Class II NEV routes as 45 mph or less. This limit is more restrictive than AB 2353, which set the maximum design speed as 55 mph or less. It is the recommendation of this plan to defer to AB 2353 for this matter and to allow NEV lanes on roads with speeds up to 55 mph. However, City Engineer approval will be required to install NEV lanes on roadways with speed limits in excess of 45 mph. This extra level of approval ensures that NEV routes are planned not only with connectivity in mind but with safety as a priority. This policy also satisfies the need to allow NEVs on higher speed roadways. Lincoln has a few roads with design speeds greater than 45 mph that serve a critical role in the City's NEV network. For example, portions of Lincoln Boulevard and Twelve Bridges Drive both have speed limits of 50 mph and an NEV lane, and provide NEVs with direct connections between residential and commercial areas. These routes have been safely used by NEVs since 2020 or earlier and are being formally included in the NEV plan update, with approval from the City Engineer.

- b. NEV/Bike Lanes should be signed and have pavement markings at the far side of every intersection with a collector street, or at a minimum every half-mile. The sign and pavement marking criteria for NEV/Bike Lanes can be found in **Appendix D**.



3. Class III NEV Route
 - a. Class III NEV routes are roads with speeds of 35 mph or less where NEVs share the travel lane with conventional vehicle traffic
 - b. Class III NEV routes should be marked with a NEV route sign on the far side of intersections with collector streets and at a maximum every half mile. The NEV route sign can be found in **Appendix D**.

NEV Crossings

NEVs are permitted to cross at intersections where the NEV route is continuous. Per CVC §21260(2), NEVs may only cross state highways at controlled intersections, though they may cross at uncontrolled locations with the approval of the agency with primary responsibility for the intersection. The CVC also states that NEVs “may cross a roadway with a speed limit in excess of 35 miles per hour if the crossing begins and ends on a roadway with a speed limit of 35 miles per hour or less and occurs at an intersection of approximately 90 degrees”.

NEV Parking

NEVs are allowed to park in typical parking spaces like traditional motor vehicles, and multiple NEVs may not share the same parking spot. Dedicated NEV parking spaces are encouraged and design criteria are included in **Appendix E** (these parking spaces are seven-feet wide and 15-deep). Dedicated NEV parking spaces have been installed in the Lincoln Crossing Marketplace, Sterling Point Center, and Lincoln Village at Twelve Bridges shopping centers. The availability of NEV parking spots at shopping centers and other destinations throughout the City would help encourage further use of NEVs. Accordingly, per the existing NEV Plan, the following recommendations apply to new developments:

1. Charging stations should be located near the center of stalls at normal light pole locations
2. Retail and commercial properties should provide a minimum of two spaces for the first 10,000 square feet of the building area, plus one additional space for each additional 6,000 square feet
3. Medical facilities require a minimum of four (4) spaces
4. Educational facilities require a minimum of eight (8) spaces
5. Neighborhood parks require a minimum of four (4) spaces

Golf Cart Circulation Standards

Golf Cart Routes

The *Twelve Bridges Golf Cart Transportation Plan* defined four functional classifications for golf cart circulation. Golf cart facilities are limited to the golf course community. Limited connections to nearby commercial areas are permitted with the approval of the City engineer.

1. Golf Cart Paths
 - a. Golf cart paths provide a separate right-of-way for golf carts to use. These paths exist typically within the limits of the golf course community to provide access to different sections of the course. These facilities are shared with bikes and pedestrians, and NEVs are allowed onto these paths. Golf cart paths can be broken into two types:
 - i. One-way golf cart paths have a minimum width of 10-feet (eight-foot wide path with a one-foot shoulder on each side)
 - ii. Two-way golf cart paths have a minimum width of 16-feet (14-foot-wide path with one-foot shoulders on each side). These facilities are shared with bikes, pedestrians, and even NEVs. The extra width is required in order to accommodate vehicles travelling in both directions, or vehicles passing.
 - b. Proposed Modification: the existing Golf Cart Plan does not have signage recommendations for golf cart paths. However, golf cart paths should be signed. Golf cart path operators need



to know when a path is one-way, so that head-on conflicts do not arise. Likewise, bikes and pedestrians need to know if they should expect to be sharing the path with golf carts. As with NEVs, golf carts are quiet and may catch other path users by surprise. It is the recommendation of this plan that golf cart paths be appropriately signed. See **Appendix D** for an example sign.

2. Golf Cart Lanes

- a. Golf cart lanes provide a striped lane adjacent to through traffic lanes on roadways with speed limits less than 45 mph. Golf cart lanes can be shared between golf carts, NEVs, and bikes. Golf cart lanes should be striped to be at least seven-feet wide, measured from the face of curb, with a minimum vertical clearance of eight-feet from obstructions. Consistent with the existing plan, Golf cart lanes must have a smooth paved or concrete surface and be separated from vehicle travel lanes by two solid 4-inch white lines. This added buffer provides more protection to golf carts, which operate at a slower pace compared to NEVs. Roads with speed limits of greater than 25 mph and less than or equal to 40 mph must have golf cart lanes for golf carts to travel on the road. The previous golf cart plan set the road design speed for golf cart lanes as between 25 and 45 mph; this standard appears to change later in the plan, however, where it is recommended that golf carts in the golf cart community be permitted to drive on streets only where the speed limit is 35 mph or less. This recommendation was made without any reference to golf cart lanes, however, leaving the reader with the impression that golf cart lanes are only allowed on roads with speeds of 30 or 35 mph. This apparent difference has led to some confusion about what is the maximum road design speed for golf carts. Since the Streets and Highways Code is silent on this issue, it is up to the City to set the design speed for golf cart lanes. It is the recommendation of this Plan to allow golf carts on roads with speed limits of 40 mph or less, if there is a golf cart lane that meets the standards previously described. This allows the City greater flexibility for allowing golf cart travel, while still not allowing golf carts on roads with a speed differential of greater than 25 mph.
- b. Golf cart lanes should be signed and have pavement markings at the far side of every intersection with a collector street, or at a minimum every half-mile. The sign and pavement marking criteria for golf cart lanes can be found in **Appendix D**.

3. Golf Cart Routes

- a. Golf cart routes are designated residential streets and alleys with a speed limit of 25 mph or less. Golf carts share the travel lane with automobiles, bikes and NEVs.
- b. Golf cart routes should be marked with a golf cart route sign on the far side of intersections with collector streets and at a maximum every half mile. The golf cart route sign can be found in **Appendix D**.

Golf Cart Crossings

Golf cart crossings are locations where golf cart routes intersect a road that is not a golf cart route. Per section 21115.1 of the CVC, golf carts are permitted to cross any road with a speed limit of 45 mph or less, except at night. Golf carts are also not permitted to cross state highways. Crossings must occur at 90 degrees to the direction of the roadway.

Golf Cart Parking

Golf carts are allowed to park in typical parking spaces like traditional motor vehicles, and multiple golf carts may not share the same parking spot. Dedicated golf cart parking spaces are encouraged and design criteria are included in **Appendix E** (these parking spaces are seven-feet wide and 15-feet deep). The availability of golf cart parking spots at shopping centers and other destinations connected to the Twelve Bridges Golf Cart Plan area would help encourage further use of golf carts. Dedicated golf cart parking



spaces have been installed in the Lincoln Hills Town Center, Sterling Pointe Center, and Lincoln Hills Neighborhood Center shopping centers. The previous Twelve Bridges Golf Cart Plan made recommendations for golf cart parking. The suggestions are as follows:

1. **Retail Centers:** two to three spaces per 100,000 square feet, plus one additional space for each additional 30,000 square feet
2. **Commercial Centers:** two to three spaces per 100,000 square feet plus one additional space for each additional 30,000 square feet
3. **Private Neighborhood Parks:** two to three spaces
4. **Medical Facilities:** four to six spaces
5. **Educational Facilities:** six to eight spaces

EXISTING CONDITIONS

As depicted in **Figure 3**, the City has built out an expansive network of NEV and golf cart facilities. Roadways with NEV/Bike Lanes are shown in thick blue lines while roadways with golf cart/NEV lanes are displayed with thick green lines. The golf cart community is hatched with a green background to define the limits of where golf carts are allowed to travel (with the exception for access to nearby shopping centers, if golf cart paths are provided). Roadways where speeds are low enough for golf carts and NEVs to drive in the travel lanes with autos are shown with thin green lines. Likewise, roadways depicted with thin blue lines represent the locations where NEVs may drive in the travel lane with vehicles.

Existing NEV Facilities

The City does not currently have any Class I NEV routes. However, there are more than 11 miles of NEV/Bike lanes on major collectors and arterials throughout the City. Of note are Lincoln Boulevard, Joiner Parkway, and Twelve Bridges Drive. These facilities' lanes enable NEVs to travel on these main routes and access destinations throughout the City. There is also an expansive network of Class III NEV routes. The prominence of residential streets within the City allows for NEVs to travel on more than 200-miles of public streets. Additionally, signs and pavement markings have been implemented throughout the City to designate NEV lanes and routes.

As part of the assessment of existing conditions, the speed limits of City streets were mapped. **Figure 4** presents the speed limits of various roads throughout the City. The roads are color-coded based on speed to show where NEV lanes would be necessary to accommodate their travel. NEVs can drive in the travel lane with other vehicles on the roads depicted in green (speed limits of 35 mph or less). NEV lanes are required on the roads depicted in blue (speed limits greater than 35 mph) for NEVs to travel there. Furthermore, NEVs are prohibited on the roads marked in red (speed limits greater than 55 mph). The majority of roads are local roads with prima facie speed limits of 25 mph, allowing for NEVs to travel with automobiles.

NEV Route Improvements (previously planned but not implemented)

The majority of NEV lanes or routes identified in the 2006 Plan have been implemented. At least one improvement not initially identified in the Plan (Lincoln Boulevard between 1st Street and Ferrari Ranch Road) was implemented following the publication of the 2018 Bikeways Master Plan. However, several planned NEV routes were not implemented, due the economic downturn of 2009. For example, the roadway extension projects for Ferrari Ranch Road/Moore Road and Gladding Parkway were never constructed, and thus NEV lanes were not added to these roads. Furthermore, NEV lanes were not added to Nicolaus Road, Ferrari Ranch Road, or McCourtney Road.



Figure 3 – Existing NEV and Golf Cart Facilities

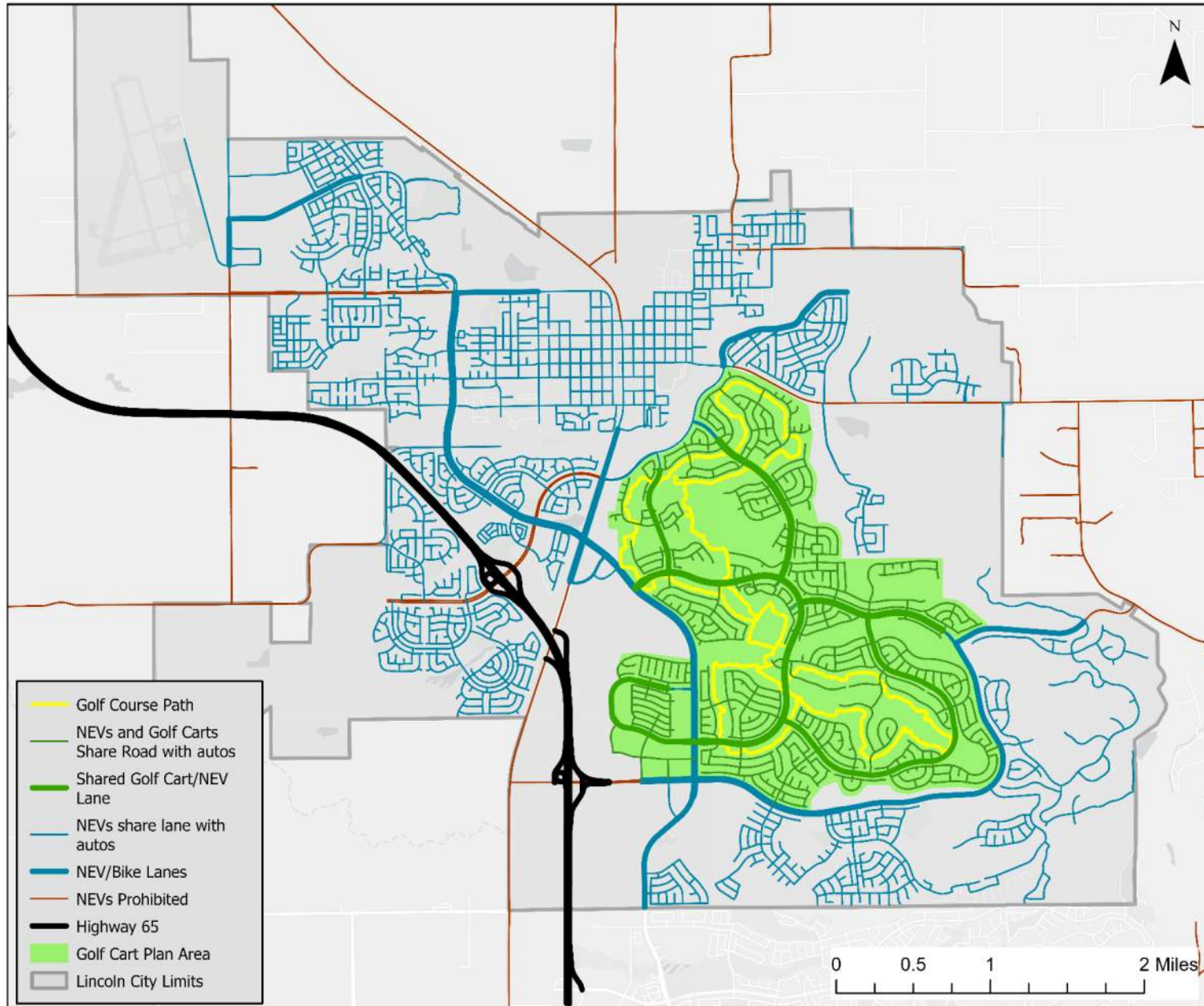
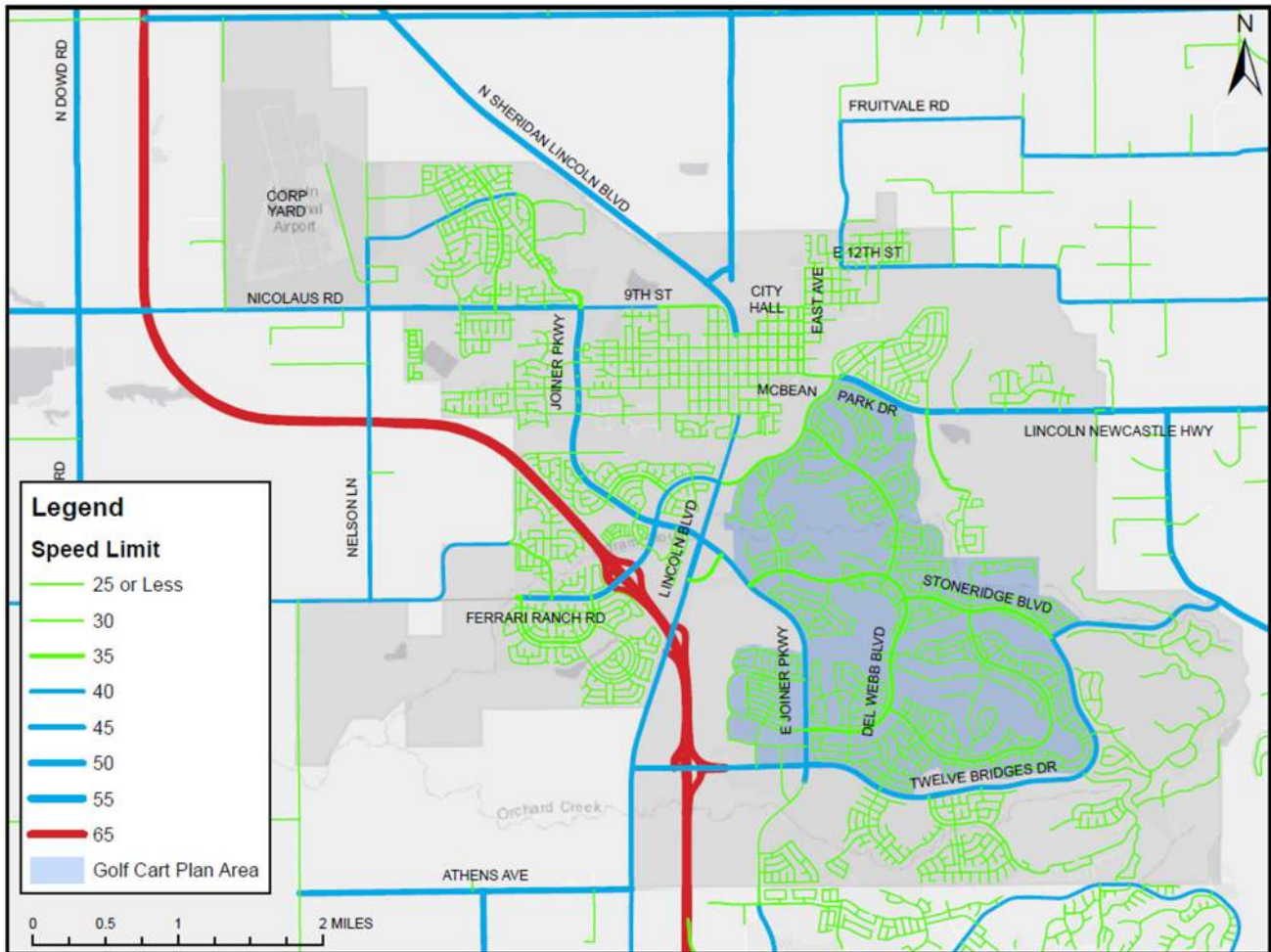




Figure 4 – Existing Speed Limits



Existing Golf Cart Facilities

The majority of the proposed projects identified in the 2006 Plan have been implemented (see **Figure 5**). All of the proposed golf cart lanes have been implemented along Del Webb Boulevard, Spring Valley Parkway, Stoneridge Boulevard, Sun City Boulevard, Ingram Parkway, and Bella Breeze Drive. Numerous golf cart route signs have been installed throughout the Twelve Bridges/Sun City community as well.

Golf Cart Improvements (previously planned but not implemented)

The golf cart paths intended to connect Del Webb Boulevard to Sterling Parkway have yet to be implemented. Similarly, the golf cart crossings at the East Joiner Parkway intersections with Sterling Parkway and Del Webb Boulevard have yet to be constructed.

PROPOSED PROJETS

Based on the completion of the existing conditions assessment and a review of the previous plans, a number of proposed NEV and golf cart projects have been identified. The purpose of these projects is to improve the connectivity of the NEV and golf cart route networks. **Figure 6** shows the location of the proposed projects within the City. Exhibits depicting the nature of the proposed improvements, as well as planning level Opinion of Probable Construction Costs (OPCCs) can be found in **Appendix F** and **Appendix G**, respectively. **Table 3** presents a general summary of the proposed projects’ costs.



Figure 5 – Existing Golf Cart Route Conditions

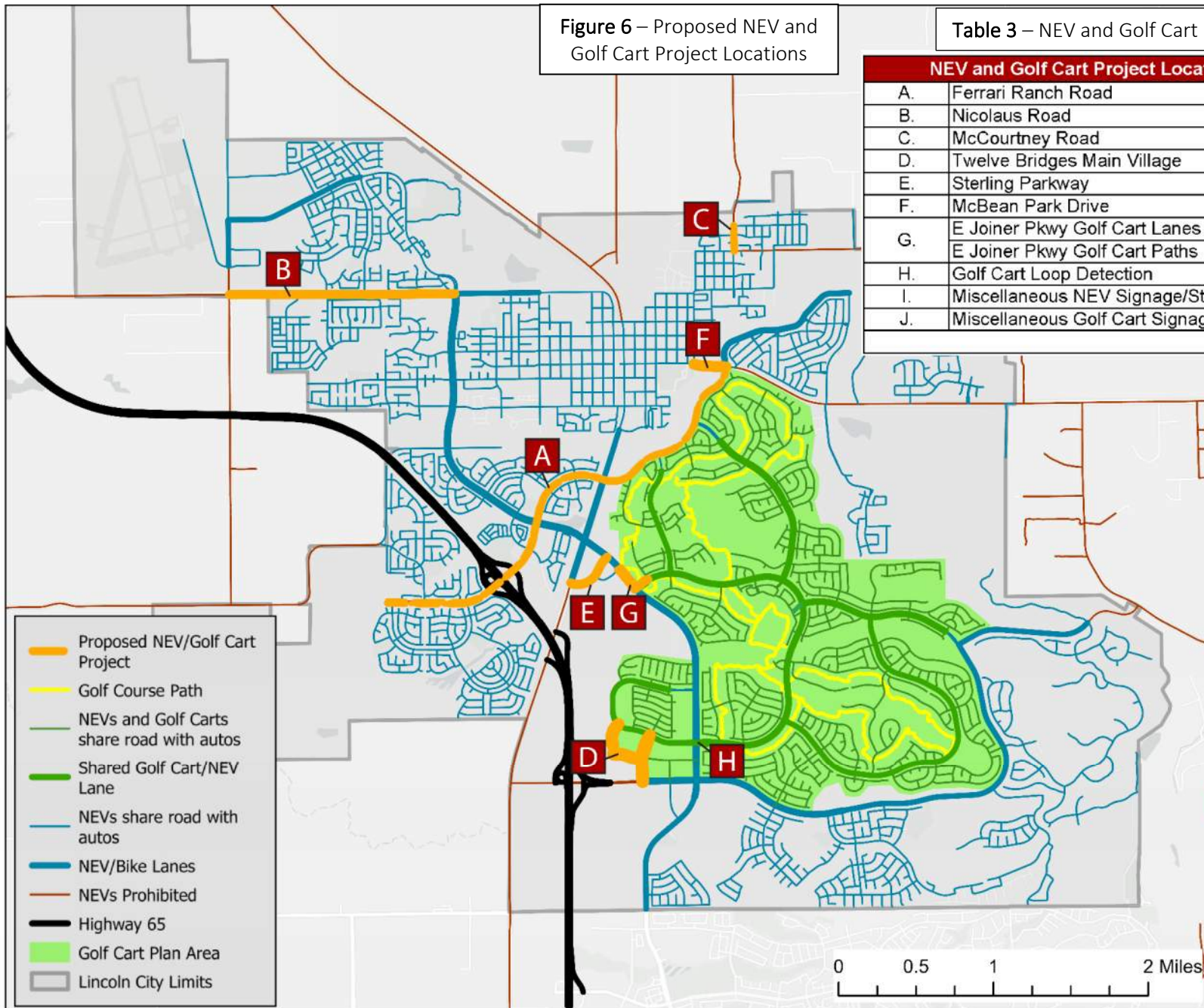




Figure 6 – Proposed NEV and Golf Cart Project Locations

Table 3 – NEV and Golf Cart Project Summary

NEV and Golf Cart Project Locations		Cost
A.	Ferrari Ranch Road	\$ 204,100
B.	Nicolaus Road	\$ 1,314,400
C.	McCourtney Road	\$ 17,900
D.	Twelve Bridges Main Village	\$ 3,600
E.	Sterling Parkway	\$ 40,600
F.	McBean Park Drive	\$ 1,900
G.	E Joiner Pkwy Golf Cart Lanes	\$ 27,600
	E Joiner Pkwy Golf Cart Paths	\$ 1,073,000
H.	Golf Cart Loop Detection	\$ 19,200
I.	Miscellaneous NEV Signage/Striping	\$ 15,600
J.	Miscellaneous Golf Cart Signage/Striping	\$ 4,700
Total		\$ 2,722,600





NEVs

Ferrari Ranch Road

In the 2006 NEV Plan the entirety of Ferrari Ranch Road was planned to have NEV lanes. This enhancement has not yet been implemented though. This plan proposed that the improvements be completed in two stages:

- **Ferrari Ranch Road from Western Terminus to Lincoln Boulevard**

The speed limit is 40 mph, therefore NEV lanes are needed to allow NEVs on this road segment. Existing right-of-way allows for lane stripes to be shifted over to expand the bike lane to accommodate a standard seven-foot Bike/NEV lane. NEV pavement markings and signage should also be installed along this segment. It is recommended that the City prioritize NEV lanes along this portion of Ferrari Ranch Road because it is the only connection between the neighborhoods in the Southwest portion of Lincoln and downtown Lincoln.

- **Ferrari Ranch Road East of Lincoln Boulevard**

The speed limit is 35 mph, therefore NEV lanes are not required to provide access to NEVs. It is recommended that Ferrari Ranch Road be signed as an NEV route, giving access to NEVs to drive in the travel lane with automobiles. In the future when the road is expanded to provide more capacity, eight-foot Bike/NEV lanes can be implemented.

Nicolaus Road

Nicolaus Road is expected to become an increasingly important route for residents of Lincoln, with the addition of Subdivision-B and other residential projects. Residents with NEVs will need a way to access central Lincoln, so the addition of Nicolaus Road to the City's NEV route network would be beneficial. The speed limit along Nicolaus Road is 45 mph, therefore NEV lanes would be required for NEVs along this road. However, the bike lanes are 3.5-foot to 4-foot wide, which is too narrow to allow NEVs. There is a planted median of varying width which could be paved, making it possible to shift travel lanes over and making room for NEV/Bike lanes on the outside of the road. Priority is placed on adding NEV lanes from Teal Hollow Drive to Joiner Parkway in what is presented as Phase 1. Adding NEV lanes from Teal Hollow Drive to Aviation Boulevard would fall under Phase 2 as a beneficial long-term project.

McCourtney Road

The northeast corner of the City is bordered by Virginiatown Road and McCourtney Road and does not have any NEV routes to connect it to the rest of Lincoln. The speed limit along Virginiatown Road is 45 mph and the speed limit along McCourtney Road is 40 mph. Virginiatown road is of varying width and would require additional paving to fit a Bike/NEV lane. It is recommended that the City route NEVs north along McCourtney Road from which they can access Costa Lane, Blacksmith Avenue, or Aspen Meadows Way. The near-term action would be to restripe McCourtney Road from Virginiatown Road to Costa Lane.

Twelve Bridges Main Village

The Twelve Bridges Main Village area is located to the west of East Joiner Boulevard and north of Twelve Bridges Drive. New speed surveys have been conducted and are anticipated to become effective in February 2023. There are seven-foot bike lanes along Colonnade Drive, Dresden Drive, and Galewind Drive which could support NEV travel. However, due to the low speeds along the main roads, NEVs are allowed to use the main travel lane. Colonnade, Dresden, and Galewind Drive should be signed to officially mark these roads as NEV routes. A future speed survey will confirm these speed limits and provide additional guidance on if NEV should continue to use the automobile travel lanes on these roads.

Sterling Parkway

Sterling Parkway has a posted speed limit of 35 mph, has six-foot bike lanes, and provides access to the Sterling Pointe shopping center. Sterling Parkway allows for NEV travel in the automobile lane but the



road lacks proper signage. NEV route signs should be posted to make it clear that NEVs are permitted on this road. Additionally, the driveway intersection Sterling Parkway should be signed and striped as an NEV route. This driveway is also an important potential route for golf carts and will be discussed further in the following section.

McBean Park Drive/State Route (SR) 193

McBean Park Drive/SR 193 is an important route for vehicles traveling to/from Newcastle and points east. With developments such as the Village 1 Specific Plan being constructed, this road will also become an important route for Lincoln residents for inter-city travel.

The speed limit of McBean Park Drive/SR 193 is 35 mph from East Avenue to Ferrari Ranch Road, and 55 mph East of Ferrari Ranch Road. The bike lane is seven-foot wide between Ferrari Ranch Road and East Avenue, allowing the segment to be designated as a shared Bike/NEV lane. This action could be completed immediately as Phase 1 of the McBean Park Drive improvements, with the posting of NEV route signs and pavement markings. While the speed limit does not necessitate a NEV lane, the presence of vehicles beginning to reduce their speed from 55 mph does add another consideration to whether an NEV lane would be beneficial. Given that vehicles would likely not decelerate immediately to 35 mph, it is recommended to include a NEV lane as an extra element of protection for NEVs.

Miscellaneous Signage

To be more consistent with the NEV route signage recommendations described in the circulation requirements section, it is recommended that additional NEV route signs be posted at locations throughout downtown Lincoln. A total of 30 new signs are recommended along the downtown grid, as reflected in **Figure 7**.

Golf Carts

Given the extensive striping and signage already completed after the adoption of the *Twelve Bridges Golf Cart Transportation Plan*, there are few projects remaining to be implemented in this established community. It is recommended that golf cart facilities be constructed between Del Webb Boulevard and Sterling Parkway to provide residents with better access to the adjacent commercial areas. It is also recommended that golf cart detection loops be installed at the intersection of Del Webb Blvd/Bella Breeze Dr and E Joiner Pkwy to make it easier for Eastbound and Westbound golf carts to cross. Additional signage for golf cart routes is also needed at locations throughout the golf cart plan area, as presented in **Figure 8**. This project is summarized in **Table 4**.

Sterling Parkway Golf Cart Route

The 2006 Golf Cart Plan recommended that golf carts should have access to the Sterling Pointe Shopping Center from the golf cart plan area via E Joiner Pkwy. This updated plan recommends two possible alternatives to provide golf carts with access to this community destination. The first alternative is a near-term, lower cost improvement that entails the installation (i.e., modification of the existing striping to provide the necessary buffer) of golf cart lanes on E Joiner Pkwy, between Del Webb Blvd and the Sterling Parkway driveway. The second alternative is a higher cost project that includes the construction of Class I golf cart paths on either side of E Joiner Pkwy along this stretch. These projects are recommended to improve golf cart safety along E Joiner Pkwy and at its intersection with Del Webb Blvd. The implementation of either alternative is expected to provide the necessary infrastructure and clarity for golf carts to safely travel along this route.



Figure 7 – Proposed NEV Signs in Downtown

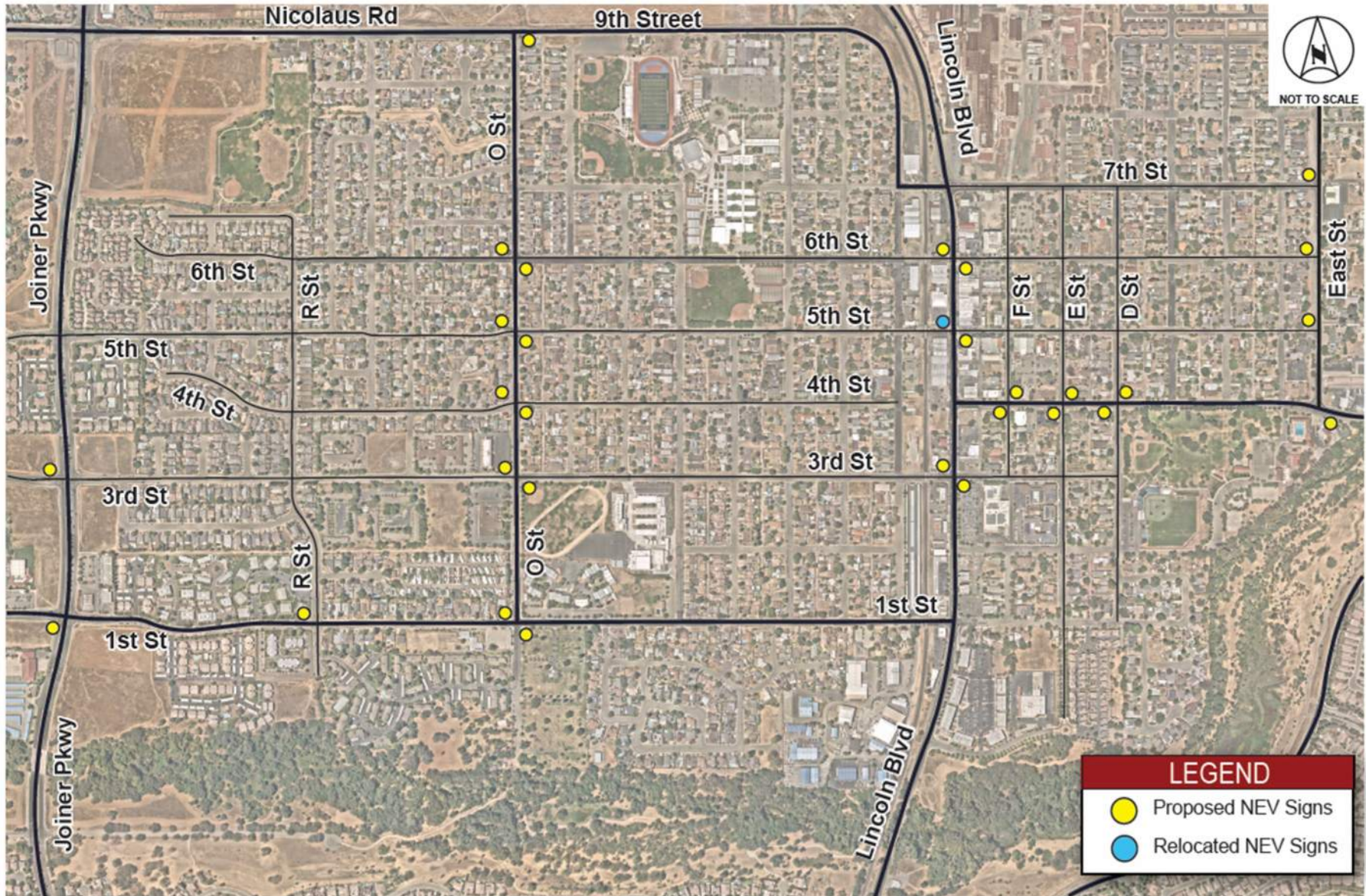




Figure 8 – Proposed Golf Cart Projects



Appendix F contains a sketch of the proposed improvements in Alternative 1, and Appendix G contains a planning level OPCC. It is recommended that the golf cart lane along westbound Del Webb Blvd be extended to meet the intersection, as it currently terminates at the guard shack on Del Webb Blvd. There is sufficient width on the Del Webb Blvd approach to the intersection to accommodate an 11-foot wide left-turn lane, a 10-foot wide right-turn lane and a 7-9 foot golf cart lane with a double stipe buffer between the golf cart lane and the adjacent right-turn lane. Signage can be posted to direct golf carts to make a right turn at the intersection.

The speed limit along E Joiner Pkwy is 40 mph, so it would be permissible for golf carts to share the Class II NEV/Bike Lane that currently exists. Pavement markings and signage should be posted at the intersection of Del Webb Blvd and E Joiner Pkwy so that Northbound NEVs and bikes are aware that they share the lane with golf carts. It is expected that golf carts approaching the Sterling Pkwy driveway will exit the road at the existing turnout, position themselves to cross in the crosswalk across E Joiner Pkwy, and thus access the shopping center without having to make a left turn from E Joiner Pkwy. Signs should be posted at the intersection directing golf carts to exit and use the turnout for this purpose.



The pavement markings in the Southbound NEV/Bike lane should be updated to account for the presence of golf carts. Additionally, signage such as “Golf Carts entering the Roadway” are recommended at the beginning of the golf cart lanes in both the NB and SB directions. Given the context, it is the desire of the City to make it clear that drivers should expect to see golf carts on the road.

Golf carts returning to the golf cart plan area can drive Southbound on E. Joiner Parkway in the golf cart lane until they reach the intersection with Del Webb Blvd. Golf carts that desire to turn left should proceed straight until they reach the other side of the intersection, and then re-position themselves to cross in the crosswalk across E Joiner Pkwy. Given that the intersection is all way stop controlled, golf carts will need to pull up to the crosswalk, re-position themselves to make the movement, and then proceed when it is safe to do so, while obeying all traffic laws. To better facilitate this movement, it is recommended that an additional crosswalk be installed across the private driveway specifically for golf carts.

This report also proposes a higher cost, long-term improvement that the City can implement to further improve golf cart access and safety. The installation of Class I golf cart paths on either side of E Joiner Pkwy would provide separation between golf carts and automobiles, and the NB path could connect directly to the turn-out located near the Sterling Pointe Driveway. Such a project would necessitate the widening of the existing sidewalks to the 10-foot width required for a Class I golf cart path. Golf carts would then be allowed to travel alongside E Joiner Parkway up to the Sterling Pointe driveway, and then be able to turn into the driveway to access the Sterling Pointe shopping center. Southbound vehicles could travel in the golf cart path on the West side of the road, until they reach Del Webb Blvd. They would then cross in the crosswalk, the same as in the other alternative design.

Additional work would be required on the Westbound Del Webb approach to support this alternative, given that the golf cart lane terminates before the intersection. It is suggested in this alternative that a curb ramp be installed to provide golf carts with access to the sidewalk. The sidewalk would need to be widened by at least 2 feet, plus one-foot shoulders on each side, for it to qualify as a one-way golf cart path. This widened path would connect to the golf cart path leading from Del Webb Boulevard to the Sterling Pointe driveway. **Appendix F** contains a planning-level figure showing the proposed golf cart path, and **Appendix G** contains a planning-level OPCC. There is a higher cost associated with this project because of the amount of sidewalk demolition, concrete paving, tree removal and utility relocation.

E Joiner Parkway and Del Webb Blvd/Bella Beeze Dr Golf Cart Detection Loops

It is recommended that loop detection be installed in the golf cart lanes along the Del Webb Blvd/Bella Breeze approaches to the intersection with E Joiner Pkwy. This project would enable golf carts and NEVs to cross E Joiner Pkwy more readily when there is not an automobile in the adjacent lane triggering the signal.

Miscellaneous Signage

The *Twelve Bridges Golf Cart Plan* has seven entrances, four of which do not have signage notifying drivers that they are entering a golf cart community. It is recommended that signage be posted at the intersections of East Joiner Parkway with south Del Webb Boulevard/south Bella Breeze Drive, and at the intersections of Twelve Bridges Drive with Parkside Drive, Rossi Lane, and Stoneridge Boulevard. The sign should read “This is a Golf Cart Community. Golf carts permitted in designated lanes and on residential streets”. This sign was not included in the previous golf cart plan but has been included in **Appendix D** of this plan.



The recommendation to post additional signage for NEVs in the Twelve Bridges Main Village area applies to golf carts as well. Colonnade Drive does not have any signs designating it as a golf cart route, though it lies within the bounds of the golf cart community project area. Galewind Dr and Dresden Dr are similarly lacking golf cart route signage. Additionally, the intersection of Colonnade Drive with Twelve Bridges Drive is an ideal golf cart crossing location, to allow golf cart operators access to the Lincoln Public Library. A sign should be posted on the SB approach of Colonnade Drive to notify drivers that the receiving driveway South of Twelve Bridges Drive is a golf cart route. Likewise, signage on Colonnade Drive notifying Northbound vehicles that it is a golf cart route should be posted. These signage recommendations in the Twelve Bridges Main Village Area should be re-evaluated when speed surveys are performed for these streets in the future.

COMMUNITY INVOLVEMENT

As required in AB 2353, community input was solicited regarding the update to the NEV and Golf Cart Plans. A public meeting was held on November 30, 2022, to introduce the project and present the recommended projects. Lincoln residents were able to submit their feedback on the plan, in-person, at the meeting and online via email.

Community feedback was sought on the following topics:

- **Safety** – The system should provide the highest level of safety feasible
- **Clarity** – It should be evident to residents where they can operate their NEVs and golf carts
- **Coverage** – The system should provide balanced access from the City’s activity centers for commuting and recreation purposes
- **Connectivity** – The system should provide bikeway connections to major activity centers, multimodal transfer locations, regional connections, and should integrate with golf cart and NEV facilities as appropriate
- **Use** – The proposed system should reflect use levels that are commensurate with the intended level of investment
- **Standards** – The system should reflect the appropriate Class of bicycle facility consistent with Caltrans’ design standards

The projects relating to golf carts were of particular interest and were supported by the public. After careful consideration and consultation between departments, the City ultimately decided to maintain the existing golf cart plan area to the areas contained in the original plan.

CONCLUSIONS

The City of Lincoln has invested heavily in multi-modal transportation. The City’s Bikeway Master Plan, Golf Cart Plan, and NEV Plan all stand out as examples in the region of forward thinking and sustainable planning. The recommendations in this report build upon this foundation and outline the steps that the City can take to further grow its network of golf cart and NEV routes. This report will serve as a valuable resource for community members and City staff as they make decisions regarding multi-modal transportation within Lincoln. It is recommended that this plan be updated every 5-10 years, or as needed, to reassess Lincoln’s NEV and golf cart routes and identify needed projects or deficiencies.



Appendix A

AB 2353 and AB 2963


[Home](#)
[Bill Information](#)
[California Law](#)
[Publications](#)
[Other Resources](#)
[My Subscriptions](#)
[My Favorites](#)

AB-2353 Neighborhood Electric Vehicles. (2003-2004)

SHARE THIS:



Assembly Bill No. 2353

CHAPTER 422

An act to add and repeal Chapter 7 (commencing with Section 1963) of Division 2.5 of the Streets and Highways Code, and to amend Sections 385.5, 21250, 21251, and 21260 of the Vehicle Code, relating to neighborhood electric vehicles.

[Filed with Secretary of State September 09, 2004. Approved by Governor September 09, 2004.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2353, Leslie. Neighborhood Electric Vehicles.

Existing law defines "low-speed vehicle" for purposes of the Vehicle Code as a motor vehicle, other than a motor truck, with 4 wheels on the ground that is capable of a minimum speed of 20 miles per hour and a maximum speed of 25 miles per hour on a paved level surface and that has an unladen weight of 1800 pounds or less. Existing law imposes certain restrictions on the use of low-speed vehicles on public streets and highways, and generally requires an operator of a low-speed vehicle to have a driver's license. A violation of the Vehicle Code is an infraction, unless otherwise specified.

Existing law authorizes a city or county to establish a golf cart transportation plan subject to the review of the appropriate transportation planning agency and traffic law enforcement agency. Existing law provides that operating a golf cart other than on an authorized roadway is an infraction punishable by a fine not exceeding \$100.

This bill would authorize, until January 1, 2009, the City of Lincoln and the City of Rocklin in the County of Placer to establish a neighborhood electric vehicle (NEV) transportation plan subject to the same review process established for a golf cart transportation plan. The bill would define "neighborhood electric vehicle" for these purposes to have the same meaning as the above definition of "low-speed vehicle." The bill, among other things, would provide for the plan to authorize the use of state highways by NEVs under certain conditions. The bill would require a report to the Legislature by January 1, 2008. The bill would enact other related provisions. Because the bill would revise the definition of a crime, it would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. This bill would provide that no reimbursement is required by this act for a specified reason.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Chapter 7 (commencing with Section 1963) is added to Division 2.5 of the Streets and Highways Code, to read:

CHAPTER 7. Neighborhood Electric Vehicle Transportation Plan

1963. It is the intent of the Legislature, in enacting this chapter, to authorize the City of Lincoln and the City of Rocklin in the County of Placer to establish a neighborhood electric vehicle (NEV) transportation plan for a plan area in the city. It is the further intent of the Legislature that this transportation plan be designed and developed to best serve the functional travel needs of the plan area, to have the physical safety of the NEV driver's person and property as a major planning component, and to have the capacity to accommodate NEV drivers of every legal age and range of skills. It is the intent of the Legislature, in enacting this chapter, to encourage discussions between the Legislature, the Department of Motor Vehicles, and the California Highway Patrol regarding the adoption of a new classification for licensing motorists who use neighborhood electric vehicles.

1963.1. The following definitions apply to this chapter:

(a) "Plan area" means that territory under the jurisdiction of the City of Lincoln or the City of Rocklin designated by the city for a NEV transportation plan, including the privately owned land of any owner that consents to its inclusion in the plan.

(b) "Neighborhood electric vehicle" or "NEV" means a low-speed vehicle as defined by Section 385.5 of the Vehicle Code.

(c) "NEV lanes" means all publicly owned facilities that provide for NEV travel including roadways designated by signs or permanent markings which are shared with pedestrians, bicyclists, and other motorists in the plan area.

(d) "Speed-modified golf cart" means a golf cart that is modified to meet the safety requirements of Section 571.500 of Title 49 of the Code of Federal Regulations.

1963.2. (a) The City of Lincoln and the City of Rocklin may, by ordinance or resolution, adopt a NEV transportation plan.

(b) The transportation plan shall have received a prior review and the comments of the appropriate transportation planning agency designated under subdivision (a) or (b) of Section 29532 of the Government Code and any agency having traffic law enforcement responsibilities in the City of Lincoln or the City of Rocklin.

(c) The transportation plan may include the use of a state highway, or any crossing of the highway, subject to the approval of the Department of Transportation.

1963.3. The transportation plan shall include, but is not limited to, all of the following elements:

(a) Route selection, which includes a finding that the route will accommodate NEVs without an adverse impact upon traffic safety, and will consider, among other things, the travel needs of commuters and other users.

(b) Transportation interfacing, which shall include, but not be limited to, coordination with other modes of transportation so that a NEV driver may employ multiple modes of transportation in reaching a destination in the plan area.

(c) Citizens and community involvement in planning.

(d) Flexibility and coordination with long-range transportation planning.

(e) Provision for NEV related facilities including, but not limited to, special access points and NEV crossings.

(f) Provisions for parking facilities, including, but not limited to, community commercial centers, golf courses, public areas, parks, and other destination locations.

(g) Provisions for special paving, road markings, signage and striping for NEV travel lanes, road crossings, parking, and circulation.

(h) Provisions for NEV electrical charging stations.

(i) NEV lanes for the purposes of the transportation plan shall be classified as follows:

(1) Class I NEV routes provide for a completely separate right-of-way for the use of NEVs.

(2) Class II NEV routes provide for a separate striped lane adjacent to roadways with speed limits of 55 miles per hour or less.

(3) Class III NEV routes provide for shared use by NEVs with conventional vehicle traffic on streets with a posted speed limit of 35 miles per hour or less.

1963.4. If the City of Lincoln or the City of Rocklin adopts a NEV transportation plan, it shall do both of the following:

(a) Establish minimum general design criteria for the development, planning, and construction of separated NEV lanes, including, but not limited to, the design speed of the facility, the space requirements of the NEV, and roadway design criteria.

(b) In cooperation with the department, establish uniform specifications and symbols for signs, markers, and traffic control devices to control NEV traffic; to warn of dangerous conditions, obstacles, or hazards; to designate the right-of-way as between NEVs, other vehicles, and bicycles; to state the nature and destination of the NEV lane; and to warn pedestrians, bicyclists, and motorists of the presence of NEV traffic.

1963.5. If the City of Lincoln or the City of Rocklin adopts a NEV transportation plan, each city may do the following:

(a) Acquire, by dedication, purchase, or condemnation, real property, including easements or rights-of-way, to establish NEV lanes.

(b) Establish a NEV transportation plan as authorized by this chapter.

1963.6. If the City of Lincoln or the City of Rocklin adopts a NEV transportation plan, each city shall also adopt all of the following as part of the plan:

(a) NEVs eligible to use NEV lanes shall meet the safety requirements for low-speed vehicles as set forth in Section 571.500 of Title 49 of the Code of Federal Regulations.

(b) A permit process for golf carts that requires speed-modified golf carts to meet minimum design criteria adopted pursuant to subdivision (a). The permit process may include, but not be limited to, permit posting, permit renewal, operator education, and other related matters.

(c) Minimum safety criteria for NEV operators, including, but not limited to, requirements relating to NEV maintenance and NEV safety. Operators shall be required to possess a valid California driver's license and to comply with the financial responsibility requirements established pursuant to Chapter 1 (commencing with Section 16000) of Division 7.

(d) (1) Restrictions limiting the operation of NEVs to separated NEV lanes on those roadways identified in the transportation plan, and allowing only those NEVs and speed-modified golf carts that meet the safety equipment requirements specified in the plan to be operated on separated NEV lanes of approved roadways in the plan area.

(2) Any person operating a NEV in the plan area in violation of this subdivision is guilty of an infraction punishable by a fine not exceeding one hundred dollars (\$100).

1963.7. (a) If the City of Lincoln or the City of Rocklin adopts a NEV transportation plan pursuant to this chapter, the cities shall jointly submit a report to the Legislature on or before January 1, 2008, in consultation with the Department of Transportation, the Department of the California Highway Patrol, and local law enforcement agencies.

(b) The report shall include all of the following:

(1) A description of all NEV transportation plans and their elements that have been authorized up to that time.

(2) An evaluation of the effectiveness of the NEV transportation plans, including their impact on traffic flows and safety.

(3) A recommendation as to whether this chapter should be terminated, continued in existence applicable solely to the City of Lincoln and the City of Rocklin in the County of Placer, or expanded statewide.

1963.8. This chapter shall remain in effect only until January 1, 2009, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2009, deletes or extends that date.

SEC. 2. Section 385.5 of the Vehicle Code is amended to read:

385.5. A "low-speed vehicle" is a motor vehicle, other than a motor truck, having four wheels on the ground and an unladen weight of 1,800 pounds or less, that is capable of propelling itself at a minimum speed of 20 miles per hour and a maximum speed of 25 miles per hour, on a paved level surface. For the purposes of this section, a "low-speed vehicle" is not a golf cart, except when operated pursuant to Section 21115 or 21115.1. A "low-speed vehicle" is also known as a "neighborhood electric vehicle."

SEC. 3. Section 21250 of the Vehicle Code is amended to read:

21250. For the purposes of this article, a low-speed vehicle means a vehicle as defined in Section 385.5. A "low-speed vehicle" is also known as a "neighborhood electric vehicle."

SEC. 4. Section 21251 of the Vehicle Code is amended to read:

21251. Except as provided in Sections 1963 to 1963.8, inclusive, of the Streets and Highways Code, and Sections 4023, 21115, and 21115.1, a low-speed vehicle is subject to all the provisions applicable to a motor vehicle, and the driver of a low-speed vehicle is subject to all the provisions applicable to the driver of a motor vehicle or other vehicle, when applicable, by this code or any other code, with the exception of those provisions which, by their very nature, can have no application.

SEC. 5. Section 21260 of the Vehicle Code is amended to read:

21260. (a) Except as provided in paragraph (1) of subdivision (b), or in an area where a neighborhood electric vehicle transportation plan has been adopted pursuant to Chapter 7 (commencing with Section 1963) of Division 2.5 of the Streets and Highways Code, the operator of a low-speed vehicle shall not operate the vehicle on any roadway with a speed limit in excess of 35 miles per hour.

(b) (1) The operator of a low-speed vehicle may cross a roadway with a speed limit in excess of 35 miles per hour if the crossing begins and ends on a roadway with a speed limit of 35 miles per hour or less and occurs at an intersection of approximately 90 degrees.

(2) Notwithstanding paragraph (1), the operator of a low-speed vehicle shall not traverse an uncontrolled intersection with any state highway unless that intersection has been approved and authorized by the agency having primary traffic enforcement responsibilities for that crossing by a low-speed vehicle.

SEC. 6. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.


[Home](#)
[Bill Information](#)
[California Law](#)
[Publications](#)
[Other Resources](#)
[My Subscriptions](#)
[My Favorites](#)

AB-2963 Neighborhood electric vehicles. (2007-2008)

SHARE THIS:



Assembly Bill No. 2963

CHAPTER 199

An act to amend Section 1963.7 of, to amend, renumber, and add Section 1963.8 of, and to add Section 1963.9 to the Streets and Highways Code, relating to neighborhood electric vehicles.

[Approved by Governor July 22, 2008. Filed with Secretary of State July 22, 2008.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2963, Gaines. Neighborhood electric vehicles.

Existing law authorizes, until January 1, 2009, the Cities of Lincoln and Rocklin in Placer County to establish a neighborhood electric vehicle (NEV) transportation plan that enables these low-speed vehicles to travel, among other things, on or along various roadways. A person operating a NEV in the plan area in violation of permit and safety rules adopted as part of the plan is guilty of an infraction. If a NEV transportation plan is implemented, the cities are required to submit a report to the Legislature by January 1, 2008, evaluating the effectiveness of the NEV plan and containing a recommendation for either terminating, continuing, or expanding these provisions.

This bill would extend the January 1, 2009, termination date applicable to these NEV provisions to January 1, 2012. Because the bill would change the definition of a crime in that regard, it would impose a state-mandated local program. The bill would extend the time for the City of Rocklin to submit a report to the Legislature from January 1, 2008, to January 1, 2009, relative to its implementation of these provisions. The bill would declare that the City of Lincoln has complied with these provisions and is thereby authorized to proceed with the implementation of its NEV transportation plan. The bill would require both cities, to the extent they implement a NEV transportation plan, to report to the Legislature by January 1, 2011, relative to whether the NEV transportation provisions should be terminated, continued, or expanded statewide.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 1963.7 of the Streets and Highways Code is amended to read:

1963.7. (a) If the City of Rocklin adopts a NEV transportation plan pursuant to this chapter, the city shall submit a report to the Legislature on or before January 1, 2009, in consultation with the Department of Transportation,

the Department of the California Highway Patrol, and local law enforcement agencies.

(b) The report shall include all of the following:

- (1) A description of all NEV transportation plans and their elements that have been authorized up to that time.
- (2) An evaluation of the effectiveness of the NEV transportation plans, including their impact on traffic flows and safety.
- (3) A recommendation as to whether this chapter should be terminated with respect to the City of Rocklin in the County of Placer or expanded statewide.

SEC. 2. Section 1963.8 of the Streets and Highways Code is amended and renumbered to read:

1963.10. This chapter shall remain in effect only until January 1, 2012, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2012, deletes or extends that date.

SEC. 3. Section 1963.8 is added to the Streets and Highways Code, to read:

1963.8. The Legislature finds and declares that the City of Lincoln has complied with all of the requirements of this chapter relative to development of a NEV transportation plan and associated reporting to the Legislature. Accordingly, the City of Lincoln is authorized to proceed with the implementation of its NEV transportation plan.

SEC. 4. Section 1963.9 is added to the Streets and Highways Code, to read:

1963.9. (a) If the City of Lincoln or the City of Rocklin implements a NEV transportation plan pursuant to this chapter, the cities shall jointly, or individually if only one city implements a plan, submit a subsequent report to the initial report required by Section 1963.7 to the Legislature on or before January 1, 2011, in consultation with the Department of Transportation, the Department of the California Highway Patrol, and local law enforcement agencies.

(b) The report shall include all of the following:

- (1) A description of all NEV transportation plans and their elements that have been authorized up to that time.
- (2) An evaluation of the effectiveness of the NEV transportation plans, including their impact on traffic flows and safety.
- (3) A recommendation as to whether this chapter should be terminated, continued in existence applicable solely to the City of Lincoln or the City of Rocklin in Placer County, or both, or expanded statewide.

SEC. 5. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.



Appendix B

California Vehicle Code Language

Code: Section: [Up^](#) [Add To My Favorites](#)**STREETS AND HIGHWAYS CODE - SHC****DIVISION 2.5. CITY STREETS [1800 - 1967.11]** (*Division 2.5 added by Stats. 1951, Ch. 463.*)**CHAPTER 6. Golf Cart Transportation Plan [1950 - 1961]** (*Heading of Chapter 6 amended by Stats. 1995, Ch. 334, Sec. 2.*)

1950. It is the intent of the Legislature, in enacting this chapter, to authorize any city or county to establish a golf cart transportation plan for a plan area in the city or county. It is the further intent of the Legislature that this transportation plan be designed and developed to best serve the functional travel needs of the plan area, to have the physical safety of the golf cart driver's person and property as a major planning component, and to have the capacity to accommodate golf cart drivers of every legal age and range of skills.

(*Amended by Stats. 1995, Ch. 334, Sec. 3. Effective January 1, 1996.*)

1951. The following definitions apply to this chapter:

(a) "Plan area" means that territory under the jurisdiction of a city or county designated by the city or county for a golf cart transportation plan, including the privately owned land of any owner that consents to its inclusion in the plan.

(b) "Golf cart" means a motor vehicle having not less than three wheels in contact with the ground and unladen weight less than 1,300 pounds which is designed to be and is operated at not more than 25 miles per hour and is designated to carry golf equipment and not more than two persons, including the driver.

(c) "Golf cart lanes" means all publicly owned facilities that provide for golf cart travel including roadways designated by signs or permanent markings which are shared with pedestrians, bicyclists, and other motorists in the plan area.

(*Amended by Stats. 1995, Ch. 334, Sec. 4. Effective January 1, 1996.*)

1953. (a) A city or county may, by ordinance or resolution, adopt a golf cart transportation plan.

(b) The transportation plan shall have received a prior review and the comments of the appropriate transportation planning agency designated under subdivision (a) or (b) of Section 29532 of the Government Code and any agency having traffic law enforcement responsibilities in that city or county.

(c) The transportation plan shall not include the use of any state highway, or any portion thereof, except that a crossing of, or a golf cart lane along, a state highway may be included in the plan, if authorized by the department and the law enforcement agency having primary traffic enforcement responsibility of that highway or portion thereof.

(*Amended by Stats. 2004, Ch. 615, Sec. 16. Effective January 1, 2005.*)

1955. The transportation plan shall include, but is not limited to, all of the following elements:

(a) Route selection, which includes a finding that the route will accommodate golf carts without an adverse impact upon traffic safety, and will consider, among other things, the travel needs of commuters and other users.

(b) Transportation interfacing, which shall include, but not be limited to, coordination with other modes of transportation so that a golf cart driver may employ multiple modes of transportation in reaching a destination in the plan area.

(c) Citizens and community involvement in planning.

(d) Flexibility and coordination with long-range transportation planning.

- (e) Provision for golf cart related facilities including, but not limited to, special access points and golf cart crossings.
- (f) Provisions for parking facilities, including, but not limited to, community commercial centers, golf courses, public areas, parks, and other destination locations.
- (g) Provisions for special paving, road markings, signage and striping for golf cart travel lanes, road crossings, parking, and circulation.
- (h) No adopted transportation plan shall include the establishment of a golf cart lane along, or that cross, a state highway unless authorized by the department.

(Added by Stats. 1994, Ch. 598, Sec. 1. Effective January 1, 1995.)

1957. (a) If a city or county adopts a golf cart transportation plan, it shall do both of the following:

(1) Establish minimum general design criteria for the development, planning, and construction of separated golf cart lanes, including, but not limited to, the design speed of the facility, the space requirements of the golf cart, and roadway design criteria.

(2) In cooperation with the department, establish uniform specifications and symbols for signs, markers, and traffic control devices to control golf cart traffic; to warn of dangerous conditions, obstacles, or hazards; to designate the right-of-way as between golf carts, other vehicles, and bicycles; to state the nature and destination of the golf cart lane; and to warn pedestrians, bicyclists, and motorists of the presence of golf cart traffic.

(b) The construction of separated golf cart lanes, as required under paragraph (1) of subdivision (a), does not apply in any of the following locations:

(1) A residence district, as defined in Section 515 of the Vehicle Code, located within any city containing a population of less than 50,000 residents with a geographical area of more than 20 square miles in which city there are at least 20 golf courses, if the speed limit in that district is 25 miles per hour or less.

(2) (A) The City of La Verne, on those street and highway segments for which the city council makes a finding that the street or highway segment is suitable to safely permit the use of regular vehicular traffic and also the driving of golf carts, and makes a separate finding that the construction of separated golf cart lanes is infeasible given the physical space limitations of the street or highway segment. In addition, these street or highway segments shall meet all of the following requirements:

(i) Have speed limits of 25 miles per hour or less, as established by an engineering and traffic survey.

(ii) Be immediately adjacent to or surrounded by the campus of a university or a retirement community.

(iii) Provide a route between unconnected portions of the campus of a university or the real property of a retirement community, or provide direct access to an otherwise inaccessible portion of the campus of a university or the real property of a retirement community.

(iv) Be approved for purposes of this paragraph by the law enforcement agency with primary traffic jurisdiction over the street or highway segments.

(v) Accommodate golf carts without adversely impacting traffic safety or the travel needs of commuters and other users, according to a safety determination made by a traffic engineer.

(vi) Be limited to golf carts owned by the university or retirement community and equipped with a windshield, headlights, brake lights, and seatbelts.

(vii) Limit the use of golf carts to employees of the university or retirement community acting within the scope and course of employment for the maintenance or security of the university or the retirement community.

(B) Notwithstanding Section 1951 of this code and Section 345 of the Vehicle Code, for purposes of this paragraph, "golf cart" includes, but is not limited to, a utility style golf cart, used for transporting maintenance equipment, and a shuttle style golf cart.

(Amended by Stats. 2016, Ch. 101, Sec. 1. (AB 2073) Effective January 1, 2017.)

1959. A city or county that adopts a golf cart transportation plan may do the following:

(a) Acquire, by dedication, purchase, or condemnation, real property, including easements or rights-of-way, to establish golf cart lanes.

(b) Establish a golf cart transportation plan as authorized by this chapter.

(Amended by Stats. 1995, Ch. 334, Sec. 7. Effective January 1, 1996.)

1961. A city or county that adopts a golf cart transportation plan shall adopt all of the following as part of the plan:

(a) Minimum design criteria for golf carts, that may include, but not be limited to, headlights, turn signals, safety devices, mirrors, brake lights, windshields, and other devices. The criteria may include requirements for seatbelts and a covered passenger compartment.

(b) A permit process for golf carts that requires permitted golf carts to meet minimum design criteria adopted pursuant to subdivision (a). The permit process may include, but not be limited to, permit posting, permit renewal, operator education, and other related matters.

(c) Minimum safety criteria for golf cart operators, including, but not limited to, requirements relating to golf cart maintenance and golf cart safety. Operators shall be required to possess a valid California driver's license and to comply with the financial responsibility requirements established pursuant to Chapter 1 (commencing with Section 16000) of Division 7.

(d) (1) Restrictions limiting the operation of golf carts to separated golf cart lanes on those roadways identified in the transportation plan, and allowing only those golf carts that have been retrofitted with the safety equipment specified in the plan to be operated on separated golf cart lanes of approved roadways in the plan area.

(2) Any person operating a golf cart in the plan area in violation of this subdivision is guilty of an infraction punishable by a fine not exceeding one hundred dollars (\$100).

(Amended by Stats. 1997, Ch. 536, Sec. 1.5. Effective January 1, 1998.)

Code: Section: [Up^](#) [Add To My Favorites](#)**VEHICLE CODE - VEH****DIVISION 1. WORDS AND PHRASES DEFINED [100 - 681]** (*Division 1 enacted by Stats. 1959, Ch. 3.*)

100. Unless the provision or context otherwise requires, these definitions shall govern the construction of this code.
(*Enacted by Stats. 1959, Ch. 3.*)

102. "Ability to respond in damages" means financial responsibility.
(*Added by renumbering Section 95 by Stats. 1992, Ch. 974, Sec. 2. Effective September 28, 1992.*)

105. An "agricultural water-well boring rig" is a motor vehicle which is used exclusively in the boring of water-wells on agricultural property.
(*Enacted by Stats. 1959, Ch. 3.*)

108. "Airbrakes" means a brake system using compressed air either for actuating the service brakes at the wheels of the vehicle or as a source of power for controlling or applying service brakes which are actuated through hydraulic or other intermediate means.
(*Added by Stats. 1963, Ch. 207.*)

109. "Alcoholic beverage" includes any liquid or solid material intended to be ingested by a person which contains ethanol, also known as ethyl alcohol, drinking alcohol, or alcohol, including, but not limited to, alcoholic beverages as defined in Section 23004 of the Business and Professions Code, intoxicating liquor, malt beverage, beer, wine, spirits, liqueur, whiskey, rum, vodka, cordials, gin, and brandy, and any mixture containing one or more alcoholic beverages. Alcoholic beverage includes a mixture of one or more alcoholic beverages whether found or ingested separately or as a mixture.

For purposes of the Driver License Compact, "intoxicating liquor" as used in Section 15023 has the same meaning as "alcoholic beverage" as used in this code.

(*Added by renumbering Section 23151 by Stats. 1982, Ch. 53, Sec. 25. Effective February 18, 1982.*)

110. "Alley" is any highway having a roadway not exceeding 25 feet in width which is primarily used for access to the rear or side entrances of abutting property; provided, that the City and County of San Francisco may designate by ordinance or resolution as an "alley" any highway having a roadway not exceeding 25 feet in width.
(*Amended by Stats. 1965, Ch. 833.*)

111. (a) "All-terrain vehicle" means a motor vehicle subject to subdivision (a) of Section 38010 that is all of the following:

- (1) Designed for operation off of the highway by an operator with no more than one passenger.
- (2) Fifty inches or less in width.
- (3) Nine hundred pounds or less unladen weight.
- (4) Suspended on three or more low-pressure tires.
- (5) Has a single seat designed to be straddled by the operator, or a single seat designed to be straddled by the operator and a seat for no more than one passenger.

325. A "foreign jurisdiction" is any other state, the District of Columbia, territories or possessions of the United States, and foreign states, provinces, or countries.

(Enacted by Stats. 1959, Ch. 3.)

330. A "foreign vehicle" is a vehicle of a type required to be registered under this code brought into this State from a foreign jurisdiction other than in the ordinary course of business, by or through a manufacturer or dealer and not registered in this State.

(Enacted by Stats. 1959, Ch. 3.)

331. (a) A "franchise" is a written agreement between two or more persons having all of the following conditions:

- (1) A commercial relationship of definite duration or continuing indefinite duration.
- (2) The franchisee is granted the right to offer for sale or lease, or to sell or lease at retail new motor vehicles or new trailers subject to identification pursuant to Section 5014.1 manufactured or distributed by the franchisor or the right to perform authorized warranty repairs and service, or the right to perform any combination of these activities.
- (3) The franchisee constitutes a component of the franchisor's distribution system.
- (4) The operation of the franchisee's business is substantially associated with the franchisor's trademark, trade name, advertising, or other commercial symbol designating the franchisor.
- (5) The operation of a portion of the franchisee's business is substantially reliant on the franchisor for a continued supply of new vehicles, parts, or accessories.

(b) The term "franchise" does not include an agreement entered into by a manufacturer or distributor and a person where all the following apply:

- (1) The person is authorized to perform warranty repairs and service on vehicles manufactured or distributed by the manufacturer or distributor.
- (2) The person is not a new motor vehicle dealer franchisee of the manufacturer or distributor.
- (3) The person's repair and service facility is not located within the relevant market area of a new motor vehicle dealer franchisee of the manufacturer or distributor.

(Amended by Stats. 2001, Ch. 539, Sec. 5. Effective January 1, 2002.)

331.1. A "franchisee" is any person who, pursuant to a franchise, receives new motor vehicles subject to registration under this code, new off-highway motorcycles, as defined in Section 436, new all-terrain vehicles, as defined in Section 111, or new trailers subject to identification pursuant to Section 5014.1 from the franchisor and who offers for sale or lease, or sells or leases the vehicles at retail or is granted the right to perform authorized warranty repairs and service, or the right to perform any combination of these activities.

(Amended by Stats. 2004, Ch. 836, Sec. 4. Effective January 1, 2005.)

331.2. A "franchisor" is any person who manufactures, assembles, or distributes new motor vehicles subject to registration under this code, new off-highway motorcycles, as defined in Section 436, new all-terrain vehicles, as defined in Section 111, or new trailers subject to identification pursuant to Section 5014.1 and who grants a franchise.

(Amended by Stats. 2004, Ch. 836, Sec. 5. Effective January 1, 2005.)

331.3. A "recreational vehicle franchise" is a written agreement between two or more persons having both of the following conditions:

- (a) A commercial relationship of definite duration or continuing indefinite duration.
- (b) The franchisee is granted the right to offer for sale or lease, or to sell or lease at retail, new recreational vehicles, as defined in subdivision (a) of Section 18010 of the Health and Safety Code, that are manufactured or distributed by the franchisor, or the right to perform authorized warranty repairs and service, or the right to perform any combination of these activities.

(Added by Stats. 2008, Ch. 743, Sec. 1. Effective January 1, 2009.)

332. "Freeway" is a highway in respect to which the owners of abutting lands have no right or easement of access to or from their abutting lands or in respect to which such owners have only limited or restricted right or easement of access.

(Enacted by Stats. 1959, Ch. 3.)

335. A "gantry truck" is a motor vehicle so designed and constructed that it straddles the load to be transported and by means of appropriate mechanism picks up the load and supports it during transportation.

(Enacted by Stats. 1959, Ch. 3.)

336. "General public paratransit vehicle" means any motor vehicle designed for carrying no more than 24 persons and the driver, that provides local transportation to the general public, including transportation of pupils at or below the 12th-grade level to or from a public or private school or school activity, under the exclusive jurisdiction of a publicly owned and operated transit system through one of the following modes: dial-a-ride, subscription service, or route-deviated bus service. Vehicles used in the exclusive transportation of disabled persons as defined in Section 99206.5 of the Public Utilities Code, or of persons 55 years of age or older, including any persons necessary to provide assistance to these passengers, are not general public paratransit vehicles.

However, transportation of attendants, companions, or both traveling together with those individuals with disabilities who are determined to be eligible for complementary paratransit services in accordance with Title II of the Americans with Disabilities Act of 1990 (Public Law 101-336) and federal regulations adopted pursuant thereto, shall not be sufficient to qualify a vehicle as a general public paratransit vehicle.

A vehicle that provides local transportation for the general public through one of the following modes: dial-a-ride, subscription service, or route-deviated bus service, but does not provide transportation of pupils at or below the 12th-grade level to or from a public or private school or school activity, is a transit bus, as defined by Section 642, and is not a general public paratransit vehicle.

(Amended by Stats. 1993, Ch. 844, Sec. 1. Effective January 1, 1994.)

340. A "garage" is a building or other place wherein the business of storing or safekeeping vehicles of a type required to be registered under this code and which belong to members of the general public is conducted for compensation.

(Enacted by Stats. 1959, Ch. 3.)

345. A "golf cart" is a motor vehicle having not less than three wheels in contact with the ground, having an unladen weight less than 1,300 pounds, which is designed to be and is operated at not more than 15 miles per hour and designed to carry golf equipment and not more than two persons, including the driver.

(Added by Stats. 1968, Ch. 1303.)

350. (a) "Gross vehicle weight rating" (GVWR) means the weight specified by the manufacturer as the loaded weight of a single vehicle.

(b) Gross combination weight rating (GCWR) means the weight specified by the manufacturer as the loaded weight of a combination or articulated vehicle. In the absence of a weight specified by the manufacturer, GCWR shall be determined by adding the GVWR of the power unit and the total unladen weight of the towed units and any load thereon.

(Added by renumbering Section 390 by Stats. 2000, Ch. 861, Sec. 14. Effective September 29, 2000. Operative December 31, 2001, pursuant to Sec. 67 of Ch. 861.)

353. "Hazardous material" is any substance, material, or device posing an unreasonable risk to health, safety, or property during transportation, as defined by regulations adopted pursuant to Section 2402.7. "Hazardous material" includes explosives and hazardous wastes or substances as defined by regulations adopted pursuant to Section 25141 of the Health and Safety Code and medical wastes, as defined in Section 117690 of the Health and Safety Code.

(Amended by Stats. 1996, Ch. 1023, Sec. 422. Effective September 29, 1996.)

360. "Highway" is a way or place of whatever nature, publicly maintained and open to the use of the public for purposes of vehicular travel. Highway includes street.

(Enacted by Stats. 1959, Ch. 3.)

362. A "house car" is a motor vehicle originally designed, or permanently altered, and equipped for human habitation, or to which a camper has been permanently attached. A motor vehicle to which a camper has been temporarily attached is not a house car except that, for the purposes of Division 11 (commencing with Section 21000) and Division 12 (commencing with Section 24000), a motor vehicle equipped with a camper having an axle that is designed to support a portion of the weight of the camper unit shall be considered a three-axle house car regardless of the method of attachment or manner of registration. A house car shall not be deemed to be a motortruck.

(Amended by Stats. 1968, Ch. 875.)

365. An "intersection" is the area embraced within the prolongation of the lateral curb lines, or, if none, then the lateral boundary lines of the roadways, of two highways which join one another at approximately right angles or the area within which vehicles traveling upon different highways joining at any other angle may come in conflict.

(Enacted by Stats. 1959, Ch. 3.)

370. A "legal owner" is a person holding a security interest in a vehicle which is subject to the provisions of the Uniform Commercial Code, or the lessor of a vehicle to the State or to any county, city, district, or political subdivision of the State, or to the United States, under a lease, lease-sale, or rental-purchase agreement which grants possession of the vehicle to the lessee for a period of 30 consecutive days or more.

(Amended by Stats. 1963, Ch. 1867.)

371. Lessee includes "bailee" and is a person who leases, offers to lease, or is offered the lease of a motor vehicle for a term exceeding four months.

(Added by Stats. 1976, Ch. 1284.)

372. A "lessor" is a person who, for a term exceeding four months, leases or offers for lease, negotiates or attempts to negotiate a lease, or induce any person to lease a motor vehicle; and who receives or expects to receive a commission, money, brokerage fees, profit or any other thing of value from the lessee of said vehicle. "Lessor" includes "bailor" and "lease" includes "bailment."

(Added by Stats. 1976, Ch. 1284.)

373. A "lessor-retailer" is a lessor or renter who, except under the circumstances described in subdivision (a) of Section 286, makes a retail sale or sales of a previously leased or rented vehicle or vehicles to other than any of the following:

- (a) The lessee of the vehicle, or the person who, for a period of at least one year, has been designated by the lessee as the driver of the vehicle covered by a written lease agreement.
- (b) A buyer for agricultural, business, or commercial purposes.
- (c) A government or governmental agency or instrumentality.

(Amended by Stats. 1979, Ch. 561.)

375. "Lighting equipment" is any of the following lamps or devices:

- (a) A headlamp, auxiliary driving, passing, or fog lamp, fog taillamp, taillamp, stoplamp, supplemental stoplamp, license plate lamp, clearance lamp, side marker lamp, signal lamp or device, supplemental signal lamp, deceleration signal device, cornering lamp, running lamp, red, blue, amber, or white warning lamp, flashing red schoolbus lamp, side-mounted turn signal lamp, and schoolbus side lamp.
- (b) An operating unit or canceling mechanism for turn signal lamps or for the simultaneous flashing of turn signal lamps as vehicular hazard signals, and an advance stoplamp switch.
- (c) A flasher mechanism for turn signals, red schoolbus lamps, warning lamps, the simultaneous flashing of turn signal lamps as vehicular hazard signals, and the headlamp flashing systems for emergency vehicles.
- (d) Any equipment regulating the light emitted from a lamp or device or the light sources therein.
- (e) A reflector, including reflectors for use on bicycles, and reflectors used for required warning devices.
- (f) An illuminating device that emits radiation predominantly in the infrared or ultraviolet regions of the spectrum, whether or not these emissions are visible to the unaided eye.

(g) An illuminated sign installed on a bus that utilizes an electronic display to convey the route designation, route number, run number, public service announcement, or any combination of this information, or an illuminated sign utilized pursuant to Section 25353.1.

(Amended by Stats. 2011, Ch. 529, Sec. 2. (AB 607) Effective January 1, 2012.)

377. A "limit line" is a solid white line not less than 12 nor more than 24 inches wide, extending across a roadway or any portion thereof to indicate the point at which traffic is required to stop in compliance with legal requirements.

(Enacted by Stats. 1959, Ch. 3.)

378. (a) "Limousine" means any sedan or sport utility vehicle, of either standard or extended length, with a seating capacity of not more than 10 passengers including the driver, used in the transportation of passengers for hire on a prearranged basis within this state.

(b) "Modified limousine" means any vehicle that has been modified, altered, or extended in a manner that increases the overall wheelbase of the vehicle, exceeding the original equipment manufacturer's published wheelbase dimension for the base model and year of the vehicle, in any amount sufficient to accommodate additional passengers with a seating capacity of not more than 10 passengers including the driver, and is used in the transportation of passengers for hire. For purposes of this subdivision, "wheelbase" means the longitudinal distance between the vertical centerlines of the front and rear wheels.

(Added by Stats. 2014, Ch. 860, Sec. 10. (SB 611) Effective September 30, 2014.)

380. "Liquefied petroleum gas" means normal butane, isobutane, propane, or butylene (including isomers) or mixtures composed predominantly thereof in liquid or gaseous state having a vapor pressure in excess of 40 pounds per square inch absolute at a temperature of 100 degrees Fahrenheit.

(Amended by Stats. 1977, Ch. 825.)

385. "Local authorities" means the legislative body of every county or municipality having authority to adopt local police regulations.

(Enacted by Stats. 1959, Ch. 3.)

385.2. A "logging dolly" is a vehicle designed for carrying logs, having one or more axles that, if there are more than one, are not more than 54 inches apart, and used in connection with a motor truck solely for the purpose of transporting logs and securely connected with the towing vehicle both by a reach and by the load.

(Added by Stats. 2013, Ch. 523, Sec. 20. (SB 788) Effective January 1, 2014.)

385.3. A "logging vehicle" is a vehicle used exclusively in the conduct of logging operations and not designed for the transportation of persons or property on a highway.

(Added by Stats. 2013, Ch. 523, Sec. 21. (SB 788) Effective January 1, 2014.)

385.5. (a) A "low-speed vehicle" is a motor vehicle that meets all of the following requirements:

(1) Has four wheels.

(2) Can attain a speed, in one mile, of more than 20 miles per hour and not more than 25 miles per hour, on a paved level surface.

(3) Has a gross vehicle weight rating of less than 3,000 pounds.

(b) (1) For the purposes of this section, a "low-speed vehicle" is not a golf cart, except when operated pursuant to Section 21115 or 21115.1.

(2) A "low-speed vehicle" is also known as a "neighborhood electric vehicle."

(Amended by Stats. 2006, Ch. 66, Sec. 1. Effective July 12, 2006.)

386. A "managerial employee" is a person who exercises control over a business licensed under this code, whether compensated by salary or commission, including, but not limited to, any person who is employed as a general

Code: Section: [Up^](#) [Add To My Favorites](#)**VEHICLE CODE - VEH****DIVISION 11. RULES OF THE ROAD [21000 - 23336]** (*Division 11 enacted by Stats. 1959, Ch. 3.*)**CHAPTER 1. Obedience to and Effect of Traffic Laws [21000 - 21300]** (*Chapter 1 enacted by Stats. 1959, Ch. 3.*)**ARTICLE 3. Local Regulation [21100 - 21118]** (*Article 3 enacted by Stats. 1959, Ch. 3.*)

21100. Local authorities may adopt rules and regulations by ordinance or resolution regarding all of the following matters:

- (a) Regulating or prohibiting processions or assemblages on the highways.
- (b) Licensing and regulating the operation of vehicles for hire and drivers of passenger vehicles for hire.
- (c) Regulating traffic by means of traffic officers.
- (d) Regulating traffic by means of official traffic control devices meeting the requirements of Section 21400.
- (e) (1) Regulating traffic by means of a person given temporary or permanent appointment for that duty by the local authority when official traffic control devices are disabled or otherwise inoperable, at the scenes of accidents or disasters, or at locations as may require traffic direction for orderly traffic flow.
(2) A person shall not be appointed pursuant to this subdivision unless and until the local authority has submitted to the commissioner or to the chief law enforcement officer exercising jurisdiction in the enforcement of traffic laws within the area in which the person is to perform the duty, for review, a proposed program of instruction for the training of a person for that duty, and unless and until the commissioner or other chief law enforcement officer approves the proposed program. The commissioner or other chief law enforcement officer shall approve a proposed program if he or she reasonably determines that the program will provide sufficient training for persons assigned to perform the duty described in this subdivision.
- (f) Regulating traffic at the site of road or street construction or maintenance by persons authorized for that duty by the local authority.
- (g) (1) Licensing and regulating the operation of tow truck service or tow truck drivers whose principal place of business or employment is within the jurisdiction of the local authority, excepting the operation and operators of any auto dismantlers' tow vehicle licensed under Section 11505 or any tow truck operated by a repossessing agency licensed under Chapter 11 (commencing with Section 7500) of Division 3 of the Business and Professions Code and its registered employees.
(2) The Legislature finds that the safety and welfare of the general public is promoted by permitting local authorities to regulate tow truck service companies and operators by requiring licensure, insurance, and proper training in the safe operation of towing equipment, thereby ensuring against towing mistakes that may lead to violent confrontation, stranding motorists in dangerous situations, impeding the expedited vehicle recovery, and wasting state and local law enforcement's limited resources.
(3) This subdivision does not limit the authority of a city or city and county pursuant to Section 12111.
- (h) Operation of bicycles, and, as specified in Section 21114.5, electric carts by physically disabled persons, or persons 50 years of age or older, on public sidewalks.
- (i) Providing for the appointment of nonstudent school crossing guards for the protection of persons who are crossing a street or highway in the vicinity of a school or while returning thereafter to a place of safety.
- (j) Regulating the methods of deposit of garbage and refuse in streets and highways for collection by the local authority or by any person authorized by the local authority.
- (k) (1) Regulating cruising.

(Amended by Stats. 2016, Ch. 512, Sec. 2. (AB 1943) Effective January 1, 2017.)

21114. If a local authority finds that a city street or county road under its jurisdiction adjacent to an airport has been specifically designed and constructed, with the prior approval of the local authority, so as to safely permit the use thereof by regular vehicular traffic and also the taxiing of aircraft thereon between the airport and the place where such aircraft are hangared or tied down, the local authority may by resolution or ordinance designate such street or road or portion thereof for such combined use and prescribe rules and regulations therefor which shall have the force of law. No such street or road shall be so designated for a distance of more than one-half mile from the airport, provided, the finding of the local authority in this respect shall be conclusive. Upon such designation becoming effective, it shall be the sole responsibility of the local authority to enforce the provisions of the Vehicle Code and all rules and regulations adopted by it upon such street or road. Upon such designation becoming effective it shall be lawful to taxi aircraft upon such street or road in accordance with the rules and regulations prescribed as aforesaid and said aircraft need not be licensed under this code or comply with other provisions thereof.

(Added by Stats. 1963, Ch. 537.)

21114.5. Notwithstanding Section 21663 or any other provision of this code, local authorities may, by ordinance, authorize the operation of electric carts by physically disabled persons, by persons 50 years of age or older, or while in the course of their employment, by employees of the United States Postal Service, state and local governmental agencies, or utility companies, on public sidewalks. Any ordinance shall, however, contain provisions requiring any disabled person or person 50 years of age or older who owns or leases an electric cart to apply to the local authority for a permit and an identification sticker to so operate the cart, and requiring the person to affix the sticker to the cart in order to operate it on the sidewalk. The permit and sticker shall become invalid if the person ceases to operate, own, or lease the cart.

This section does not apply to devices described in subdivision (b) of Section 415.

(Amended by Stats. 1996, Ch. 124, Sec. 125. Effective January 1, 1997.)

21115. (a) If a local authority finds that a highway under its jurisdiction is located adjacent to, or provides access to, a golf course and between the golf course and the place where **golf carts** are parked or stored or is within or bounded by a real estate development offering golf facilities and is designed and constructed, so as to safely permit the use of regular vehicular traffic and also the driving of **golf carts** on the highway, the local authority may, by resolution or ordinance, designate the highway or portion of the highway for combined use and prescribe rules and regulations that shall have the force of law. No highway shall be so designated for a distance of more than one mile from the golf course if the highway is not located within a development or beyond the area of a development, provided, the finding of the local authority in this respect shall be conclusive. Upon the designation becoming effective it shall be lawful to drive **golf carts** upon the highway in accordance with the prescribed rules and regulations. The rules and regulations may establish crossing zones and speed limits and other operating standards but shall not require that the **golf carts** conform to any requirements of this code with respect to registration, licensing, or equipment, except that if operated during darkness the **golf cart** shall be subject to the provisions of Section 24001.5 regarding equipment.

The rules and regulations shall not be effective until appropriate signs giving notice thereof are posted along the highway affected.

A "real estate development offering golf facilities," for purposes of this section, means an area of single-family or multiple-family residences, the owners or occupants of which are eligible for membership in, or the use of, one or more golf courses within the development by virtue of their ownership or occupancy of a residential dwelling unit in the development.

(b) For purposes of this section, a "**golf cart**" includes a low-speed vehicle.

(Amended by Stats. 1999, Ch. 140, Sec. 4. Effective January 1, 2000.)

21115.1. (a) Notwithstanding Section 21115, a local authority may, by ordinance or resolution, establish crossing zones, for use by **golf carts** at any time other than during darkness, on any street, other than a state highway, that has a posted speed limit of 45 miles per hour or less and that is immediately adjacent to a golf course. The crossing zones shall be at an angle of approximately 90 degrees to the direction of the roadway. The ordinance or resolution shall not become effective until submitted to the law enforcement agency having primary jurisdiction over the street, the law enforcement agency finds and determines that the conditions pertaining to that street, with the addition of proper signs, markers, or lighting, or any combination of those, will permit the establishment of a **golf**

cart crossing with reasonable safety, and the signs, markers, or lighting specified by the law enforcement agency are in place.

(b) Subdivision (a) does not constitute precedent for the operation of **golf carts** on any street or highway other than in a crossing zone established pursuant to subdivision (a).

(c) For purposes of this section, a "**golf cart**" includes a low-speed vehicle.

(Amended by Stats. 1999, Ch. 140, Sec. 5. Effective January 1, 2000.)

21116. (a) No person shall drive any motor vehicle upon a roadway located on a levee, canal bank, natural watercourse bank, or pipeline right-of-way if the responsibility for maintenance of the levee, canal bank, natural watercourse bank, or pipeline right-of-way is vested in the state or in a reclamation, levee, drainage, water or irrigation district, or other local agency, unless such person has received permission to drive upon such roadway from the agency responsible for such maintenance, or unless such roadway has been dedicated as a public right-of-way.

(b) For this section to be applicable to a particular levee, canal bank, natural watercourse bank, or pipeline right-of-way, the state or other agency having responsibility for maintenance of the levee, canal bank, natural watercourse bank, or pipeline right-of-way shall erect or place appropriate signs giving notice that permission is required to be obtained to drive a motor vehicle thereon and giving notice of any special conditions or regulations that are imposed pursuant to this section and shall prepare and keep available at the principal office of the state agency or other agency affected or of the board of such agency, for examination by all interested persons, a written statement, in conformity with the existing rights of such agency to control access to the roadway, describing the nature of the vehicles, if any, to which such permission might be granted and the conditions, regulations, and procedure for the acquisition of such permission adopted pursuant to this section.

(c) Nothing in this section prohibits the establishment of bicycle paths or routes (as prescribed by Article 6.5 (commencing with Section 5078) of Chapter 1 of Division 5 of the Public Resources Code) on levees, canal banks, natural watercourse banks, or pipeline rights-of-way.

(Amended by Stats. 1971, Ch. 1361.)

21117. (a) Local authorities may, notwithstanding Section 21101 or 21101.6, by written agreement approved by their legislative bodies, transfer among themselves the responsibility for maintaining, operating, or controlling public access to any highway under their respective jurisdictions located in or adjacent to an ecological reserve or an environmentally sensitive area within their respective jurisdictions.

(b) An agreement entered into pursuant to subdivision (a) may authorize the local authority having responsibility for the highway under the agreement to do all of the following:

- (1) Limit access by motor vehicles to the highway during certain hours of the day or certain days of the week.
- (2) Prohibit access by motor vehicles during certain hours of the day or certain days of the week.
- (3) Provide for the construction or erection of barricades or other devices designed or intended to separate pedestrians from vehicles or motor vehicles.
- (4) Establish and operate a program by which vehicular access is permitted only in conjunction with specified educational programs or for disabled persons, or both.
- (5) Issue temporary permits for special events valid for less than one day.

(c) As used in this section, the term "ecological reserve" has the same meaning as defined in Section 1584 of the Fish and Game Code, and "environmentally sensitive area" has the same meaning as defined in Section 30107.5 of the Public Resources Code.

(Added by Stats. 1991, Ch. 541, Sec. 1.)

21118. (a) A local authority may adopt rules and regulations by ordinance or resolution to restrict the routes or streets upon which a tour bus described in subdivision (b) of Section 612 may be operated, if the local authority determines that it is unsafe to operate those vehicles on those routes or streets.

(b) A local authority may adopt rules and regulations by ordinance or resolution to prohibit the use of loudspeakers or public address systems by a tour bus described in subdivision (b) of Section 612, and instead require the use of headphones or similar devices by passengers for any information or presentation provided for the passengers.

(Added by Stats. 2017, Ch. 310, Sec. 2. (AB 25) Effective January 1, 2018.)

Code: Section: [Up^](#) [Add To My Favorites](#)**VEHICLE CODE - VEH****DIVISION 11. RULES OF THE ROAD [21000 - 23336]** (*Division 11 enacted by Stats. 1959, Ch. 3.*)**CHAPTER 1. Obedience to and Effect of Traffic Laws [21000 - 21300]** (*Chapter 1 enacted by Stats. 1959, Ch. 3.*)**ARTICLE 5.5. Operation of Low-Speed Vehicles [21250 - 21266]** (*Heading of Article 5.5 renumbered from Article 5 (as added by Stats. 1999, Ch. 140, Sec. 6) by Stats. 2014, Ch. 71, Sec. 179.*)

21250. For the purposes of this article, a low-speed vehicle means a vehicle as defined in Section 385.5. A "low-speed vehicle" is also known as a "neighborhood electric vehicle."

(*Amended by Stats. 2004, Ch. 422, Sec. 3. Effective January 1, 2005.*)

21251. Except as provided in Chapter 8 (commencing with Section 1965) of Division 2.5 of the Streets and Highways Code, and Sections 4023, 21115, and 21115.1, a low-speed vehicle is subject to all the provisions applicable to a motor vehicle, and the driver of a low-speed vehicle is subject to all the provisions applicable to the driver of a motor vehicle or other vehicle, when applicable, by this code or another code, with the exception of those provisions that, by their very nature, can have no application.

(*Amended by Stats. 2018, Ch. 564, Sec. 5. (SB 1151) Effective January 1, 2019.*)

21252. A vehicle dealer, selling a low-speed vehicle, shall provide to the buyer a disclosure statement regarding the operation of the vehicle that is in compliance with existing provisions of the California Code of Regulations.

(*Added by Stats. 1999, Ch. 140, Sec. 6. Effective January 1, 2000.*)

21253. A low-speed vehicle operated or parked on the roadway shall at all times meet federal Motor Vehicle Safety Standards established for low-speed vehicles in Section 571.500 of Title 49 of the Code of Federal Regulations.

(*Added by Stats. 1999, Ch. 140, Sec. 6. Effective January 1, 2000.*)

21254. A motor vehicle that was originally designated as a low-speed vehicle and that has been modified or altered to exceed 25 miles per hour shall not qualify for the relaxed federal Motor Vehicle Safety Standards established for low-speed vehicles and instead shall meet all federal Motor Vehicle Safety Standards for a passenger vehicle.

(*Added by Stats. 1999, Ch. 140, Sec. 6. Effective January 1, 2000.*)

21260. (a) Except as provided in paragraph (1) of subdivision (b), or in an area where a neighborhood electric vehicle transportation plan has been adopted pursuant to Chapter 8 (commencing with Section 1965) of Division 2.5 of the Streets and Highways Code, the operator of a low-speed vehicle shall not operate the vehicle on any roadway with a speed limit in excess of 35 miles per hour.

(b) (1) The operator of a low-speed vehicle may cross a roadway with a speed limit in excess of 35 miles per hour if the crossing begins and ends on a roadway with a speed limit of 35 miles per hour or less and occurs at an intersection of approximately 90 degrees.

(2) Notwithstanding paragraph (1), the operator of a low-speed vehicle shall not traverse an uncontrolled intersection with any state highway unless that intersection has been approved and authorized by the agency having primary traffic enforcement responsibilities for that crossing by a low-speed vehicle.

(*Amended by Stats. 2018, Ch. 564, Sec. 6. (SB 1151) Effective January 1, 2019.*)

21266. (a) Notwithstanding Section 21260, local authorities, by ordinance or resolution, may restrict or prohibit the use of low-speed vehicles.

(b) Notwithstanding Section 21260, a local law enforcement agency with primary traffic enforcement responsibilities or the Department of the California Highway Patrol may prohibit the operation of a low-speed vehicle on any roadway under that agency's or department's jurisdiction when the agency or the department deems the prohibition to be in the best interest of public safety. Any such prohibition shall become effective when appropriate signs giving notice thereof are erected upon the roadway.

(Added by Stats. 1999, Ch. 140, Sec. 6. Effective January 1, 2000.)



Appendix C

Sample Golf Cart Permit Application



CITY OF LINCOLN GOLF CART REGISTRATION APPLICATION

(MUST bring completed form, valid Driver License, Proof of Insurance to Golf Cart Inspection)

(Circle One) New / Renewal Receipt # _____ Permit # _____

Name of Cart Owner _____ Drivers License # / Expiration Date _____

Name of Principal Driver (If Different than Owner) _____

Address: _____ Phone Number: _____

Where will the Cart be Stored? _____ Email Address: _____

Manufacturer of Golf Cart _____ Identification Number _____

Model Number _____ Color _____

I understand all required equipment will be maintained in working order, and the golf cart operated in accordance with the applicable provisions of the CALIFORNIA VEHICLE CODE and CITY OF LINCOLN. I further understand any violation of these provisions and requirements may result in the permit being revoked.

Signature Required

I understand the application for a permit to operate a golf cart shall not be approved until the vehicle has been inspected and approved.

Initial

I certify that I have the proper insurance coverage to operate above golf cart on the public streets within the Community of Sun City Lincoln Hills.

Insurance Company/Policy Number

A non-refundable \$50 application or renewal fee must accompany this form. Make check payable to the City of Lincoln.

Bank/Check Number

Bring completed application, copy of insurance coverage and fee to inspection site at time of inspection.

Applicants Signature

Date and Time of Inspection _____ Location: Sun City Lincoln Hills

	Operative	Inoperative
Head Lights		
Brake Lights		
Turn Signals		
Horn		
Full Rear View Mirror		

	Operative	Inoperative
Seat Belts - operable		
Parking Brake		
Windshield		
Ridged Roof		
Proof of Insurance		
Drivers License Inspected		

Permit Issued Yes _____ No _____ Permit No. _____ By _____ Valid Until _____

Reason for Denial: _____



Appendix D

Signing and Striping Standards

APPENDIX B

STANDARD SIGNS AND MARKINGS

Figure 1

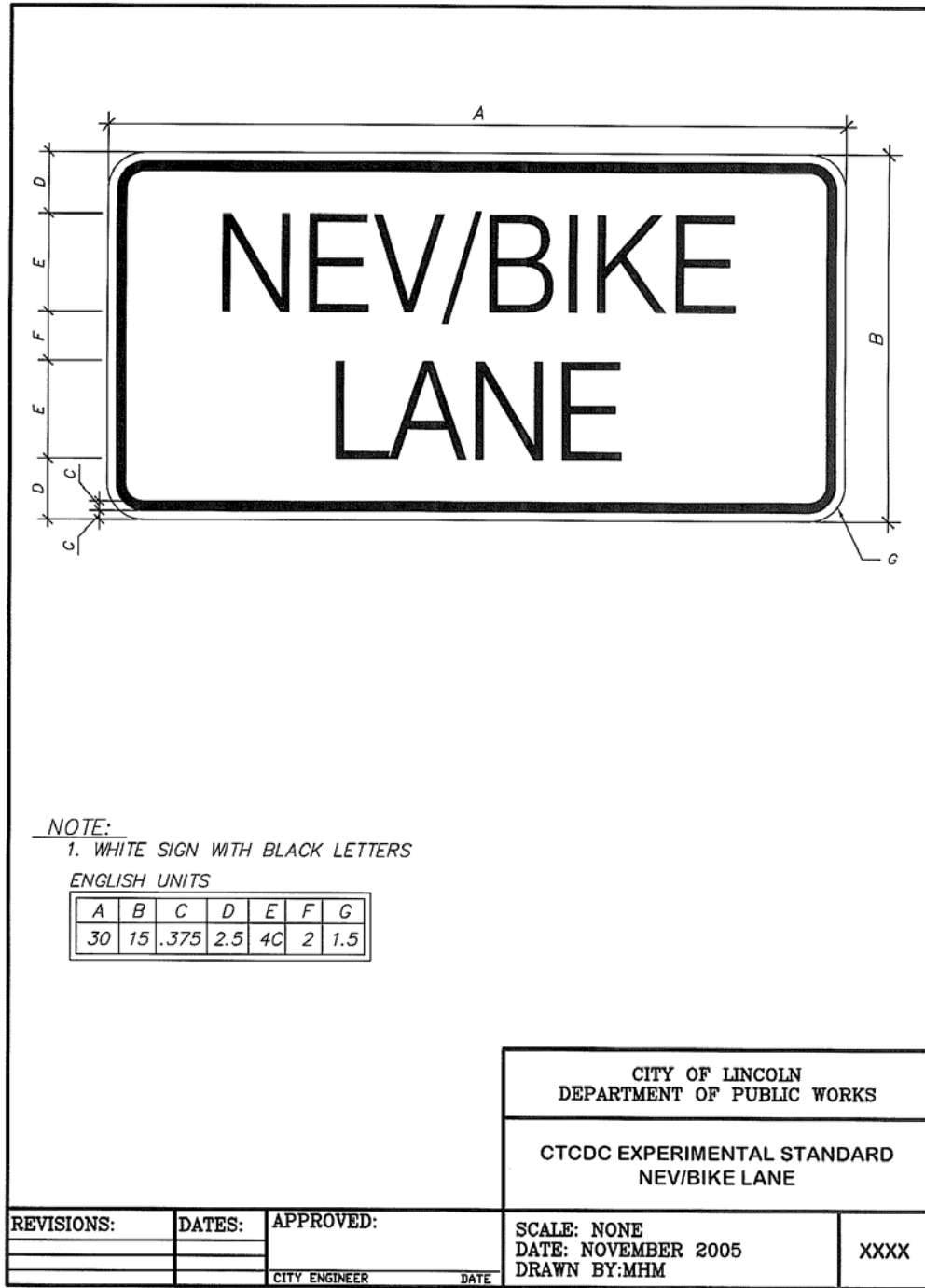


Figure 2

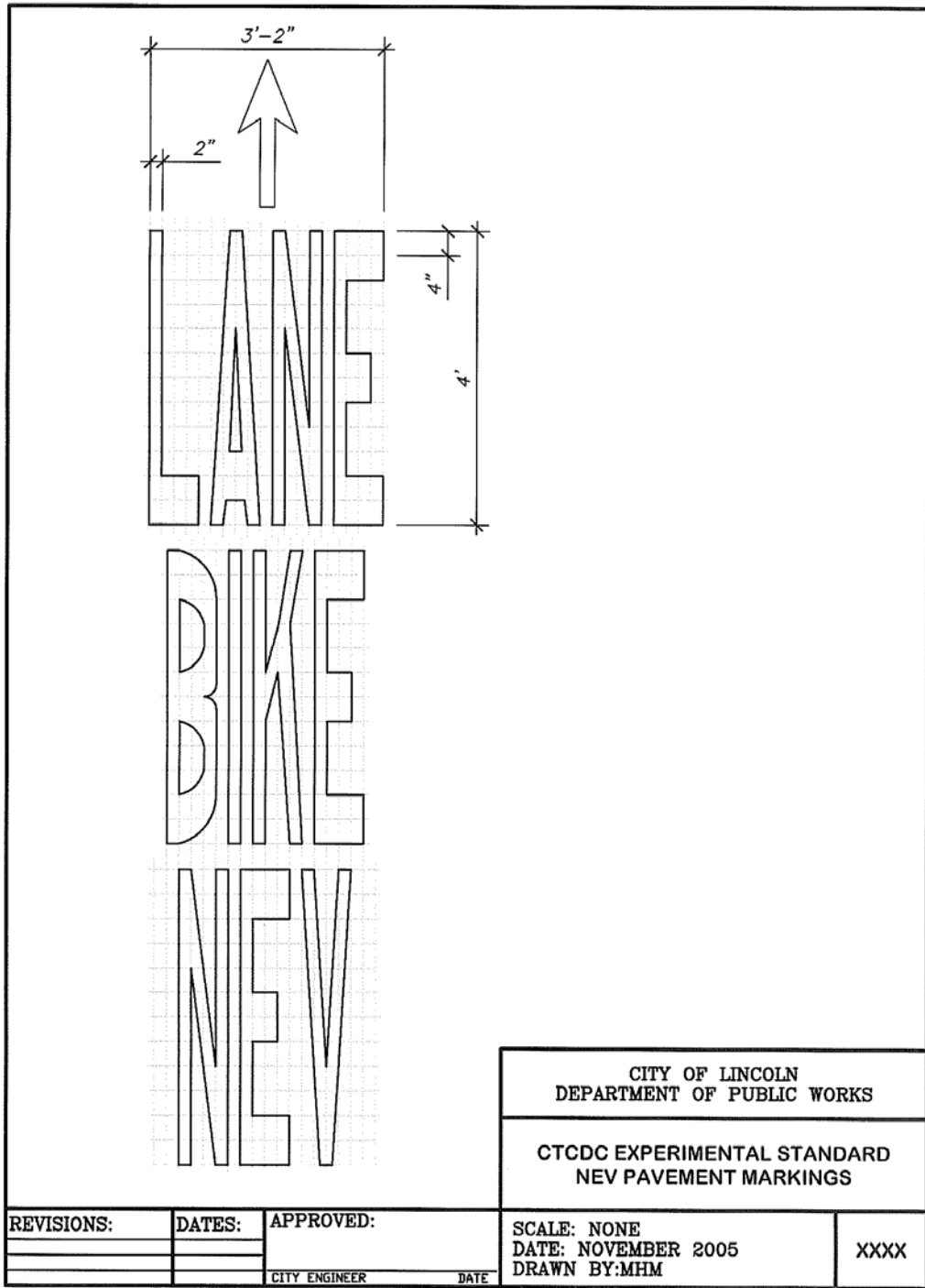


Figure 3

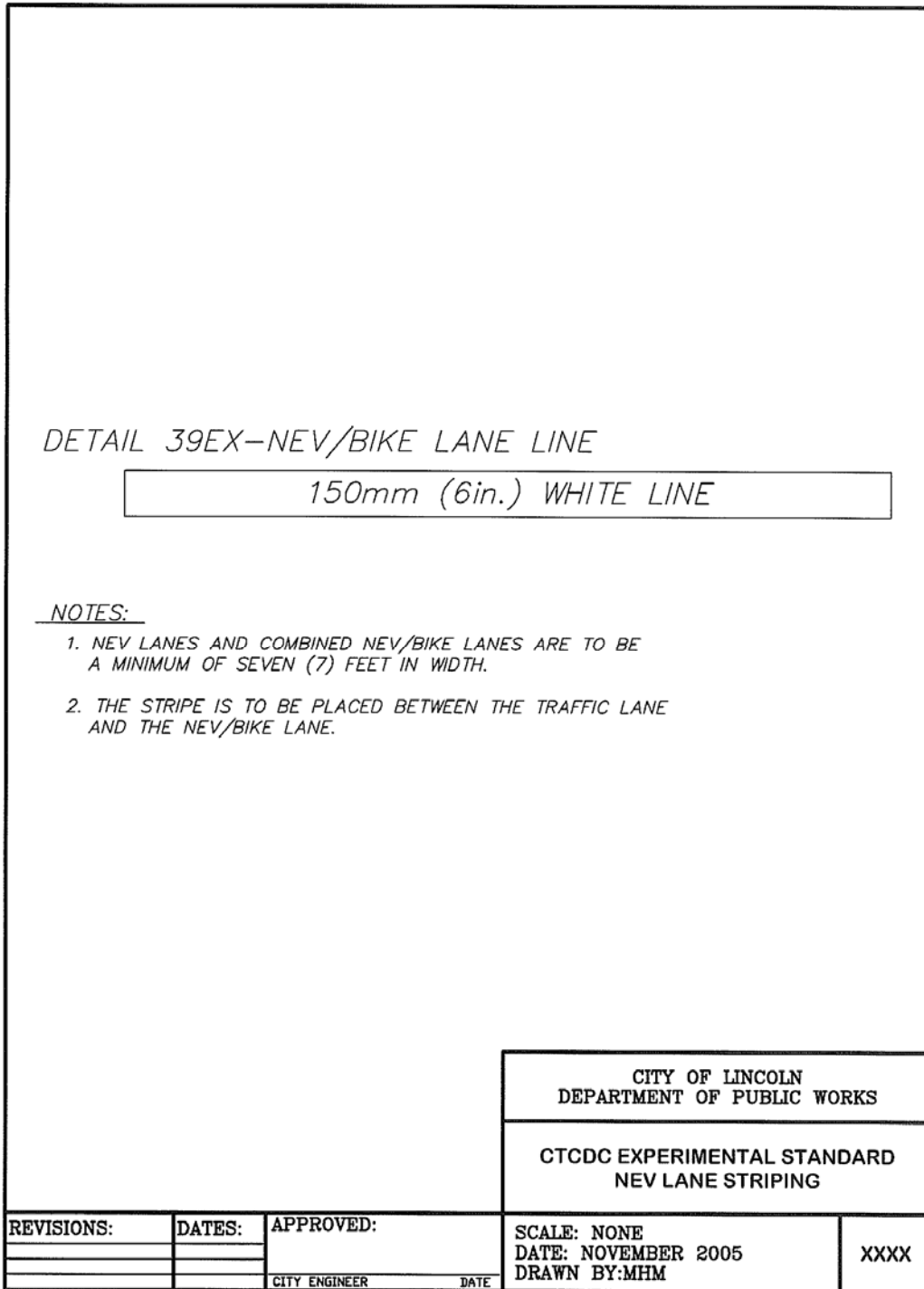


Figure 4

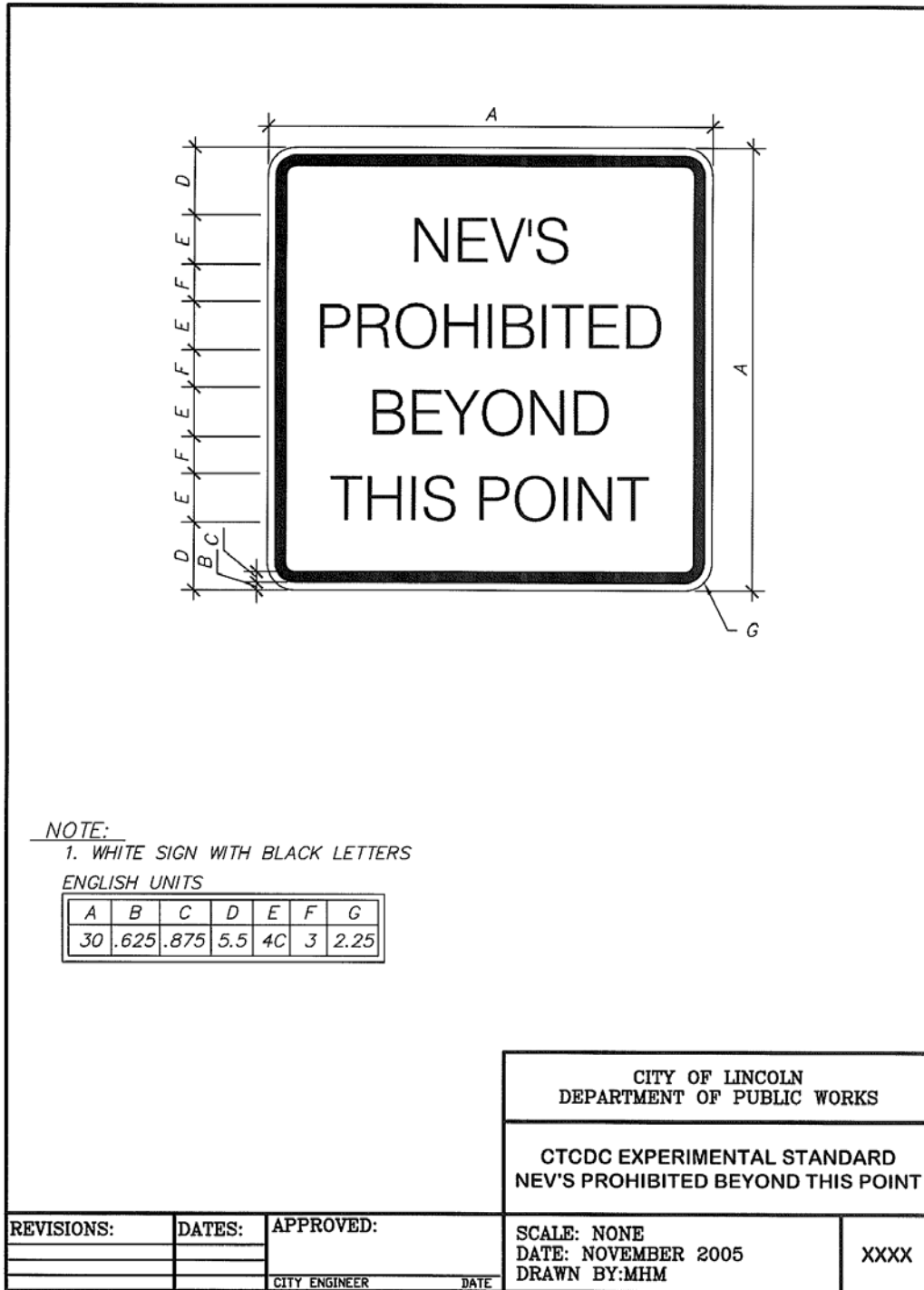
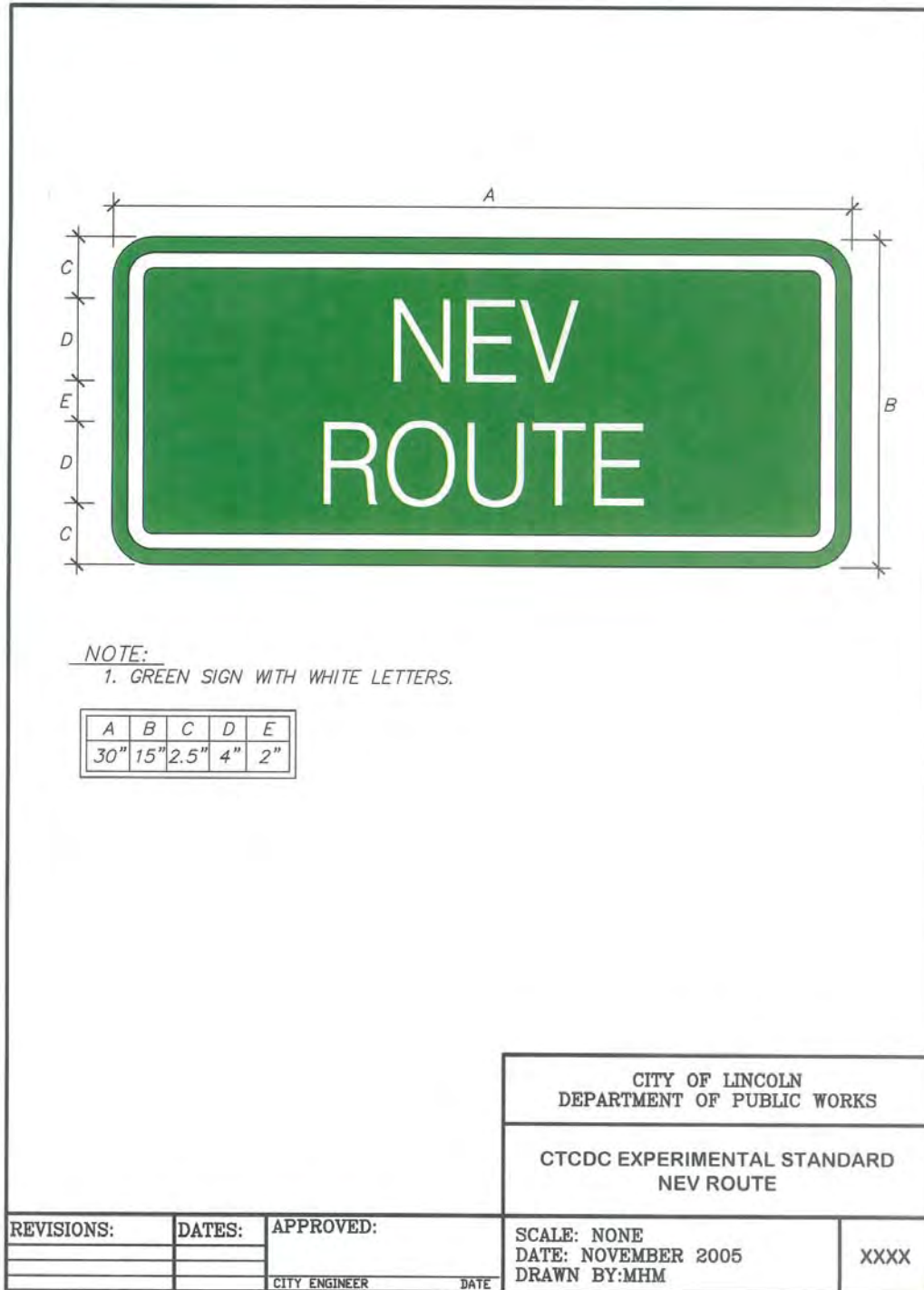


Figure 5





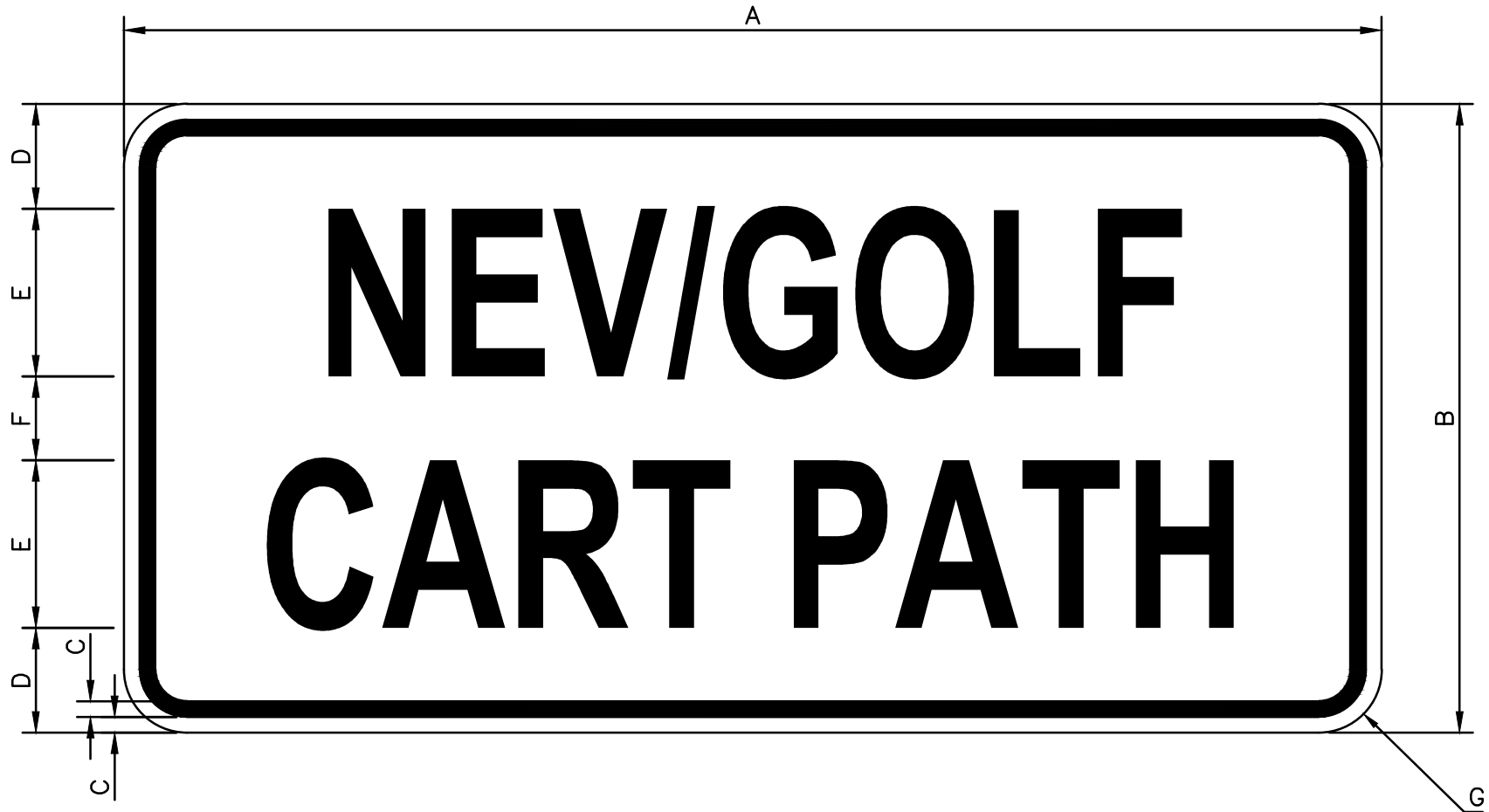


NOTE:

1. WHITE SIGN WITH BLACK LETTERS

ENGLISH UNITS

A	B	C	D	E	F	G
18	15	0.375	2.5	4.0	2.0	1.5

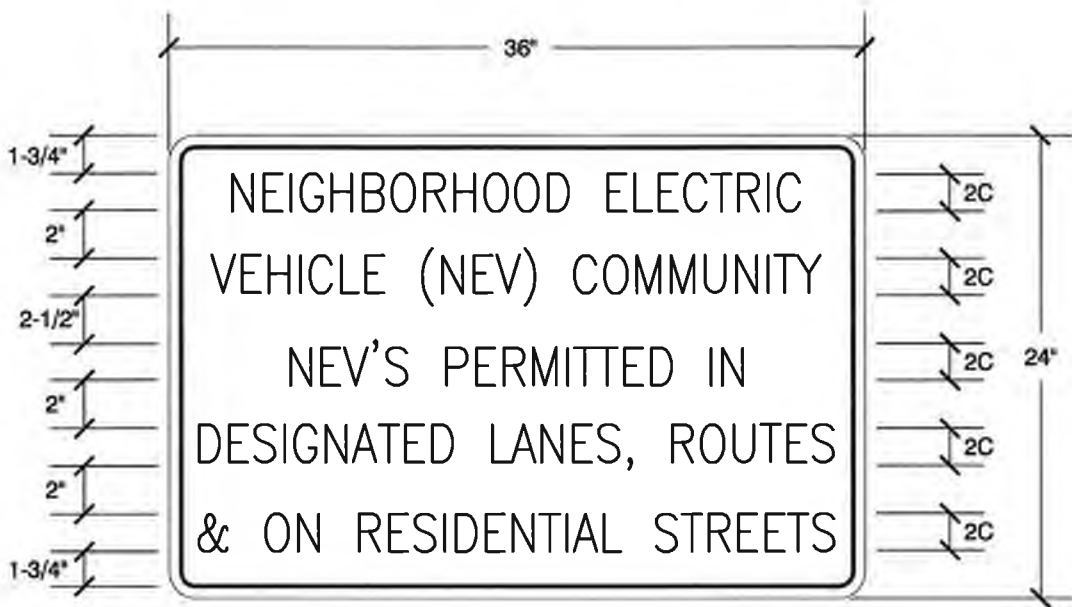


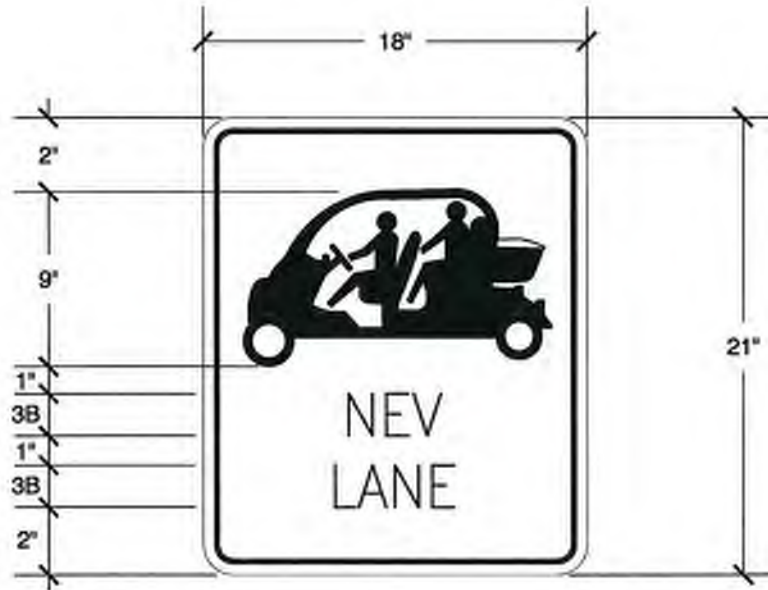
NOTE:

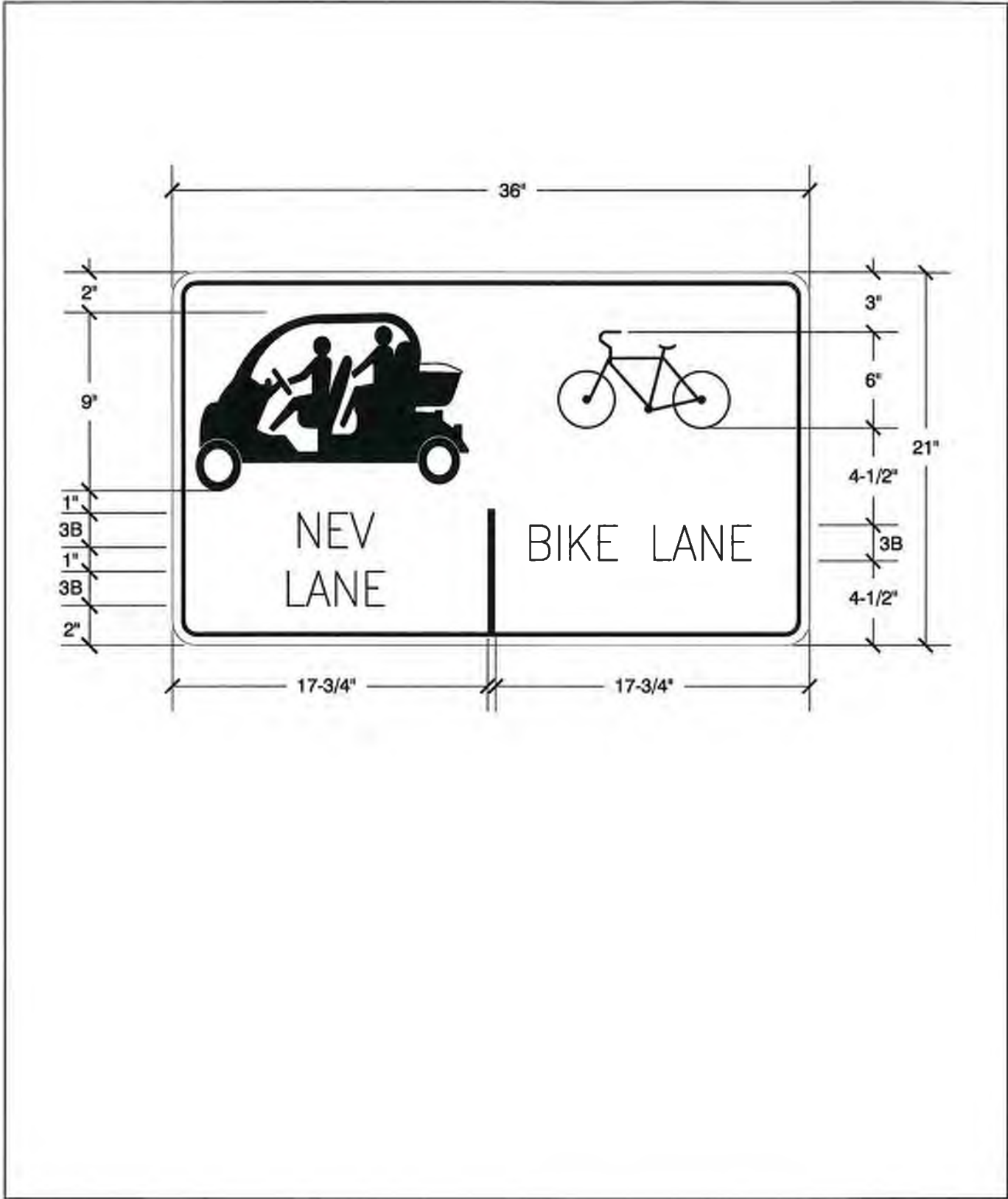
1. WHITE SIGN WITH BLACK LETTERS

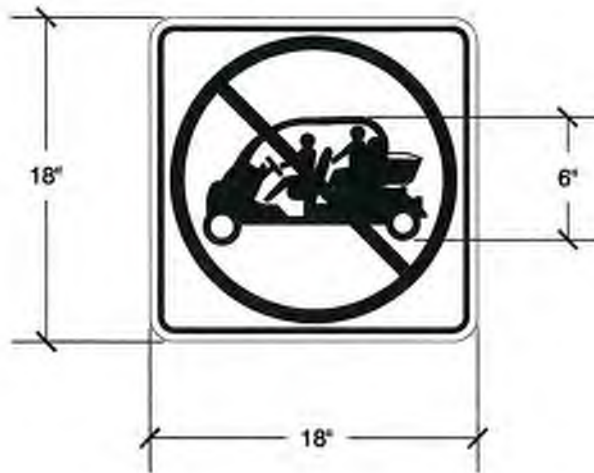
ENGLISH UNITS

A	B	C	D	E	F	G
30	15	0.375	2.5	4.0	2.0	1.5

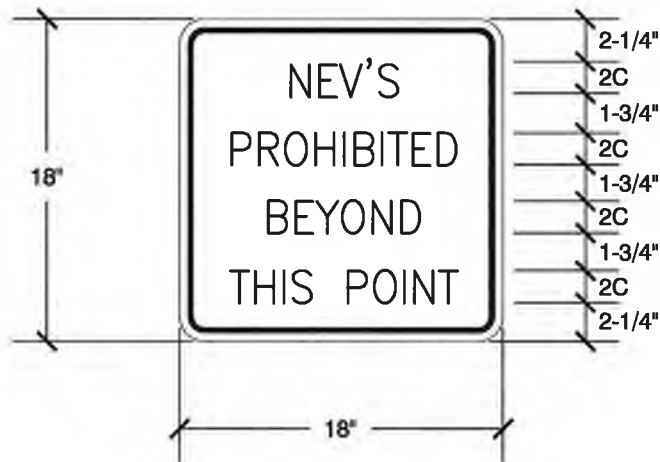








SR-y NO NEV'S SYMBOL SIGN

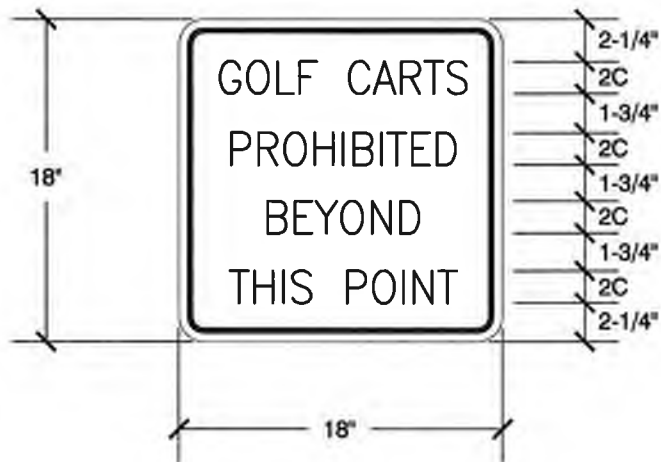


SR-yy NEV'S PROHIBITED BEYOND THIS POINT

**SR-y NO NEV'S SYMBOL SIGN
SR-yy NEV'S PROHIBITED
BEYOND THIS POINT**

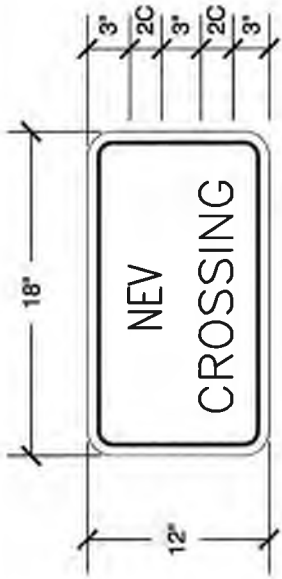


SR-z NO GOLF CARTS SYMBOL SIGN

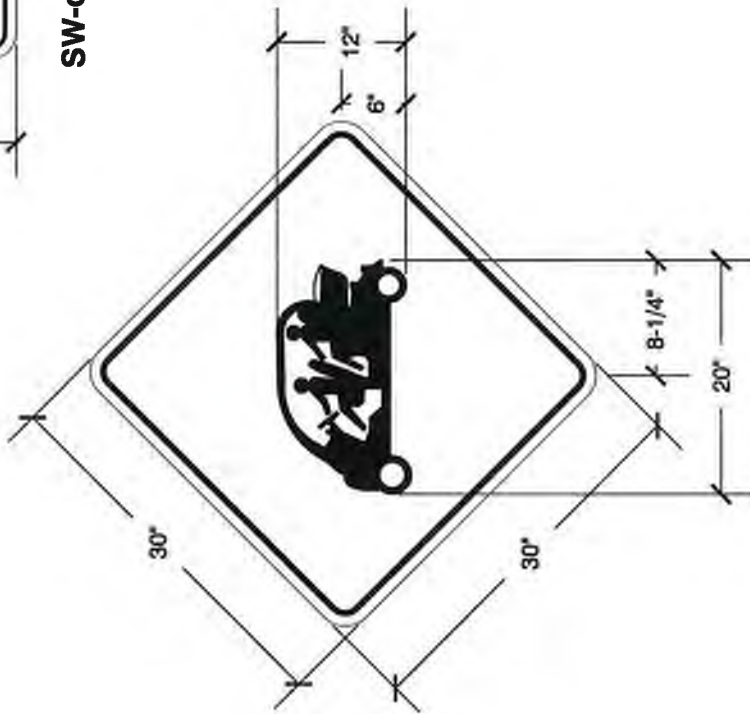


SR-zz GOLF CARTS PROHIBITED BEYOND THIS POINT

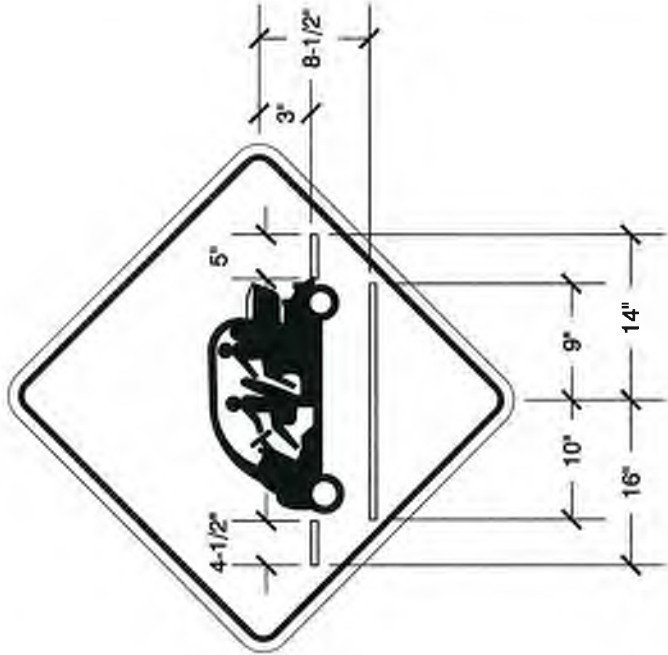
**SR-z NO GOLF CARTS SYMBOL SIGN
SR-zz GOLF CARTS PROHIBITED
BEYOND THIS POINT**



SW-cc NEV CROSSING



SW-aa ADVANCE NEV CROSSING



SW-bb NEV CROSSING

SW-aa ADVANCE NEV CROSSING
SW-bb NEV CROSSING
SW-cc NEV CROSSING



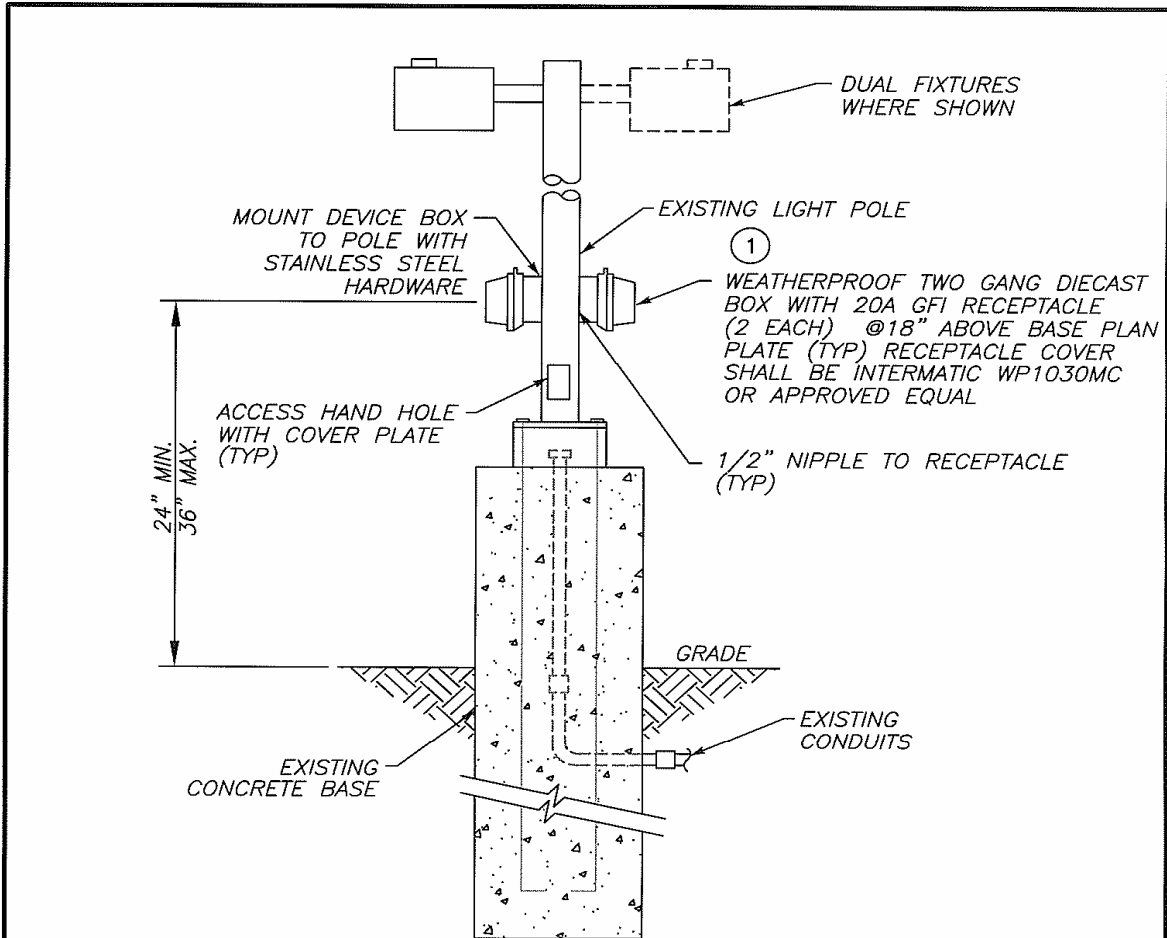


Appendix E Parking Standards

APPENDIX C

PARKING AND CHARGING STATION STANDARDS

Figure 1

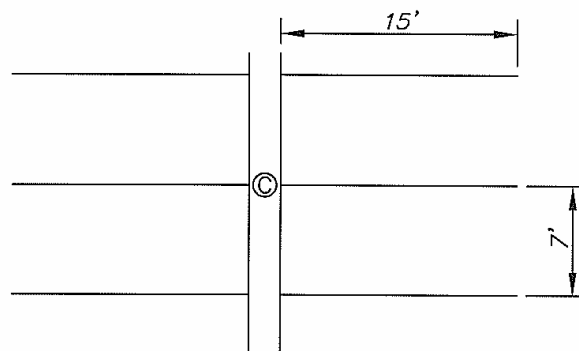


NOTES:

- ① WHERE LIGHTS ARE CONTROLLED BY REMOTE LIGHTING CONTACTORS:
 - a) INSTALL ONE 15A/1P CIRCUIT BREAKER IN EXISTING LIGHTING PEDESTAL FOR EACH RECEPTACLE (TOTAL 4).
 - b) PULL 2#12 & #12 GND FROM PEDESTAL TO LIGHT POLE IN EXISTING CONDUIT.
 - c) MOUNT RED PHENOLIC NAMEPLATE TO EACH RECEPTACLE COVER READING "RECEPTACLE POWERED FROM FOREIGN SOURCE" AND LABEL DEVICE COVER WITH PANELBOARD NAME AND CIRCUIT NUMBER.

CITY OF LINCOLN DEPARTMENT OF PUBLIC WORKS	
NEV CHARGING STATION DETAIL	
REVISIONS:	DATES:
APPROVED:	SCALE: NONE
	DATE: NOVEMBER 2005
	DRAWN BY: ATEEM
CITY ENGINEER	DATE
	XXXX

Figure 3



- © • NEV CHARGING STATION LOCATION 1-4PLEX CHARGING STATION FOR EVERY 8 SPACES.
- LOCATE CHARGING STATION(S) NEAR CENTER OF STALLS AT NORMAL LIGHT POLE LOCATIONS

NUMBER OF SPACES:

- RETAIL & COMMERCIAL: MINIMUM 2 SPACES FOR THE FIRST 10,000 SQUARE FEET OF BUILDING AREA PLUS ONE ADDITIONAL SPACE FOR EACH ADDITIONAL 6,000 SQUARE FEET.
- MEDICAL FACILITIES: MINIMUM 4 SPACES
- EDUCATIONAL FACILITIES: MINIMUM 8 SPACES
- NEIGHBORHOOD PARKS: MINIMUM 4 SPACES

CITY OF LINCOLN
DEPARTMENT OF PUBLIC WORKS

NEV PARKING STANDARDS
STALL NUMBER AND SIZE

REVISIONS:	DATES:	APPROVED:	SCALE: NONE	XXXX
			DATE: NOVEMBER 2005	
		CITY ENGINEER	DRAWN BY:MHM	
		DATE		

Figure 2



NOTE:

1. WHITE SIGN WITH BLACK LETTERS

ENGLISH UNITS

A	B	C	D	E	F
18	16.5	.375	2.5	4C	2

CITY OF LINCOLN
DEPARTMENT OF PUBLIC WORKS

STANDARD NEV SIGNS
NEV PARKING ONLY

REVISIONS:	DATES:	APPROVED:	SCALE: NONE	XXXX
			DATE: NOVEMBER 2005	
		CITY ENGINEER	DRAWN BY:MHM	
		DATE		

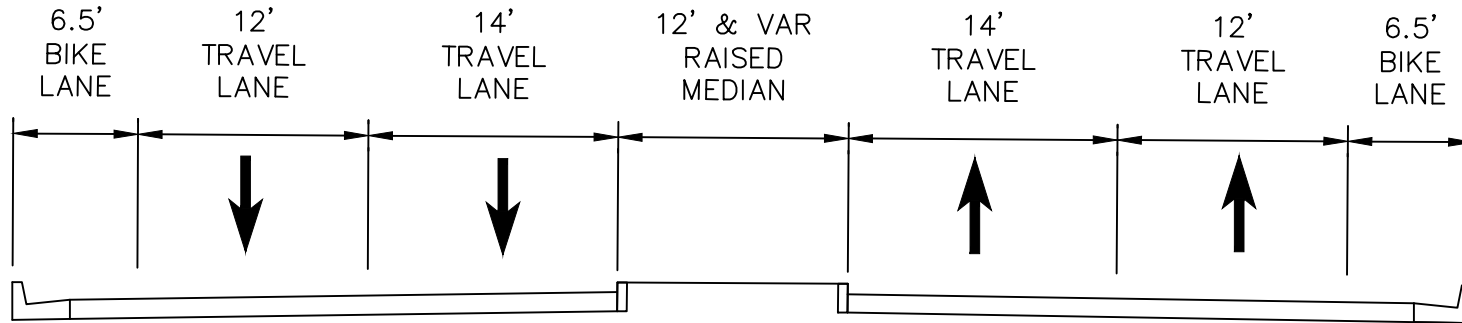


Appendix F

CAD Exhibits

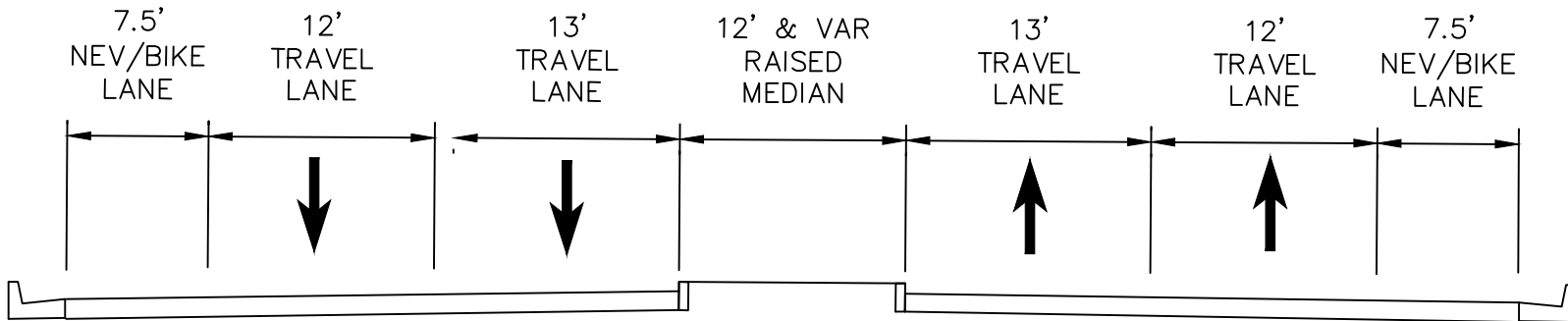
EXISTING TYPICAL SECTION

FERRARI RANCH ROAD
FROM GROVELAND LANE TO JOINER PARKWAY



PROPOSED TYPICAL SECTION

FERRARI RANCH ROAD
FROM GROVELAND LANE TO JOINER PARKWAY

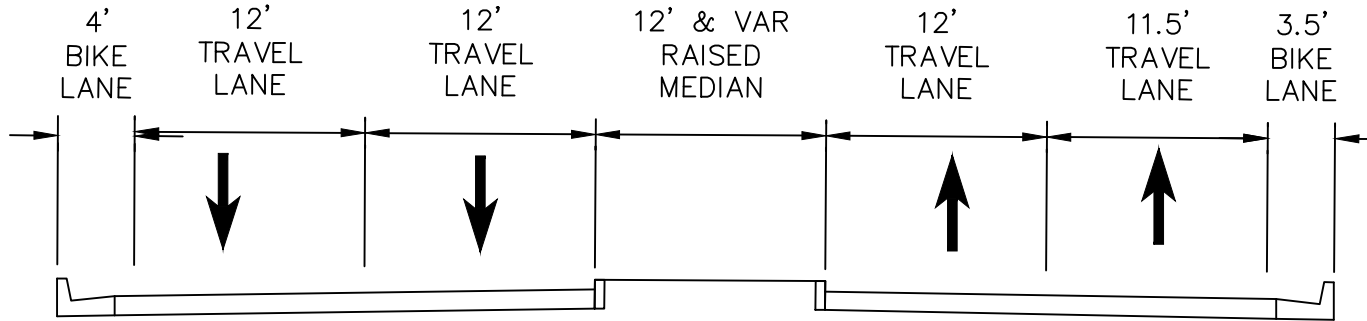


FERRARI RANCH ROAD IMPROVEMENTS TYPICAL SECTION

PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

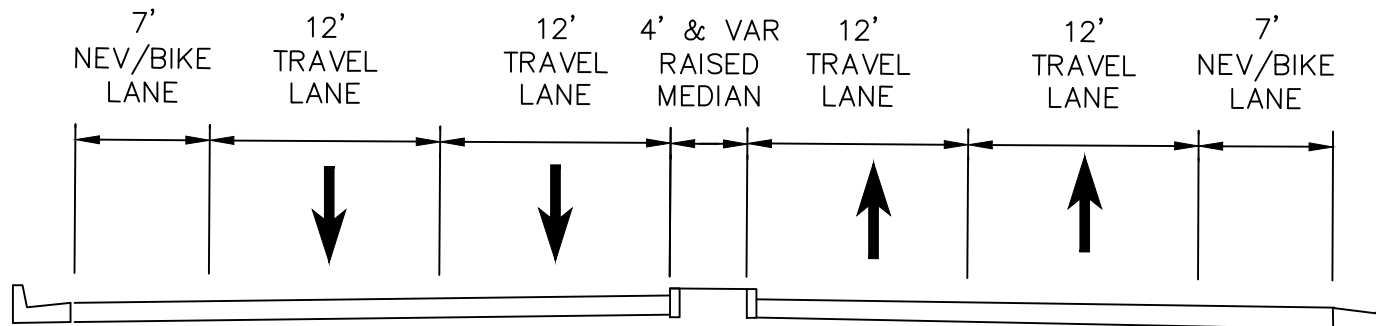
EXISTING TYPICAL SECTION

NICOLAUS ROAD
FROM TEAL HOLLOW DRIVE TO JOINER PARKWAY



PROPOSED TYPICAL SECTION

NICOLAUS ROAD
FROM TEAL HOLLOW DRIVE TO JOINER PARKWAY



NICOLAUS ROAD IMPROVEMENTS TYPICAL SECTION

PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022



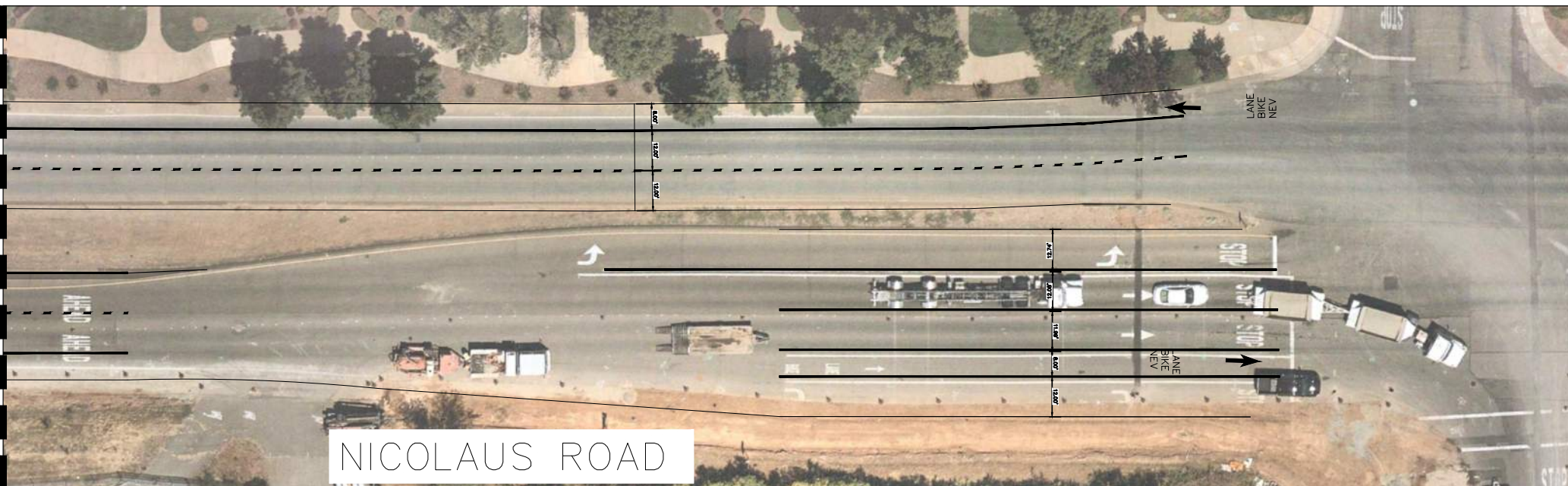
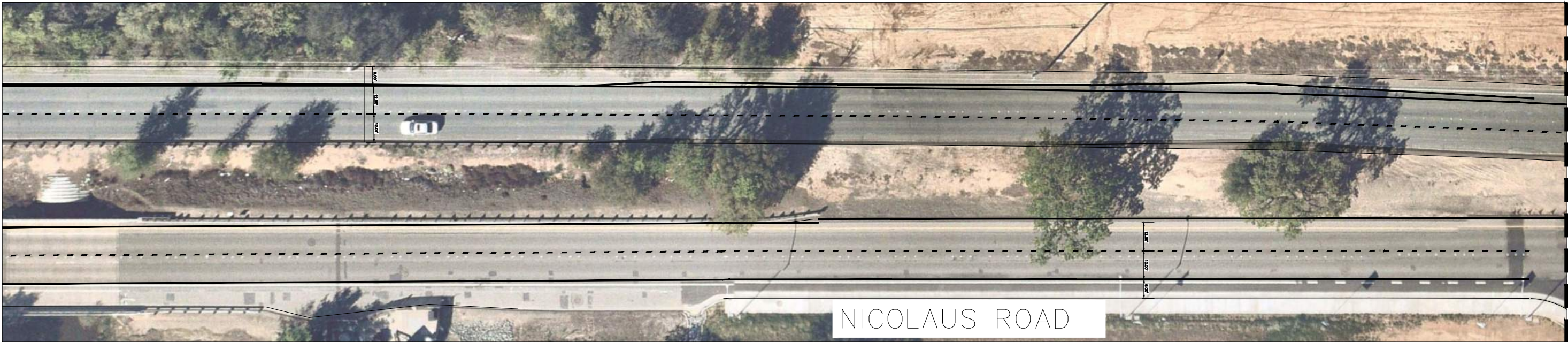
PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022



NICOLAUS ROAD IMPROVEMENTS
PLAN LINE CONCEPT EXHIBIT

SCALE 1" = 20'





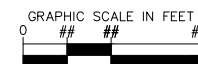
TEAL HOLLOW DR S/
WAVERLY DR

PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

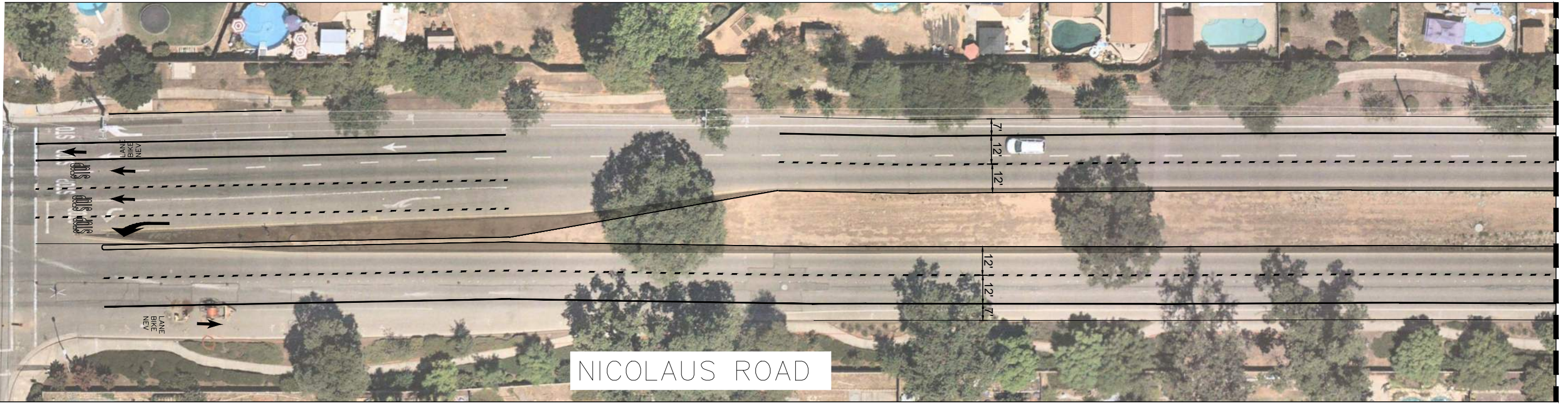


NICOLAUS ROAD PHASE 2 NEV
IMPROVEMENTS PLAN LINE
CONCEPT EXHIBIT

SCALE 1" = 20'



TEAL HOLLOW DRIVE



NICOLAUS ROAD



NICOLAUS ROAD

LAKESIDE DRIVE

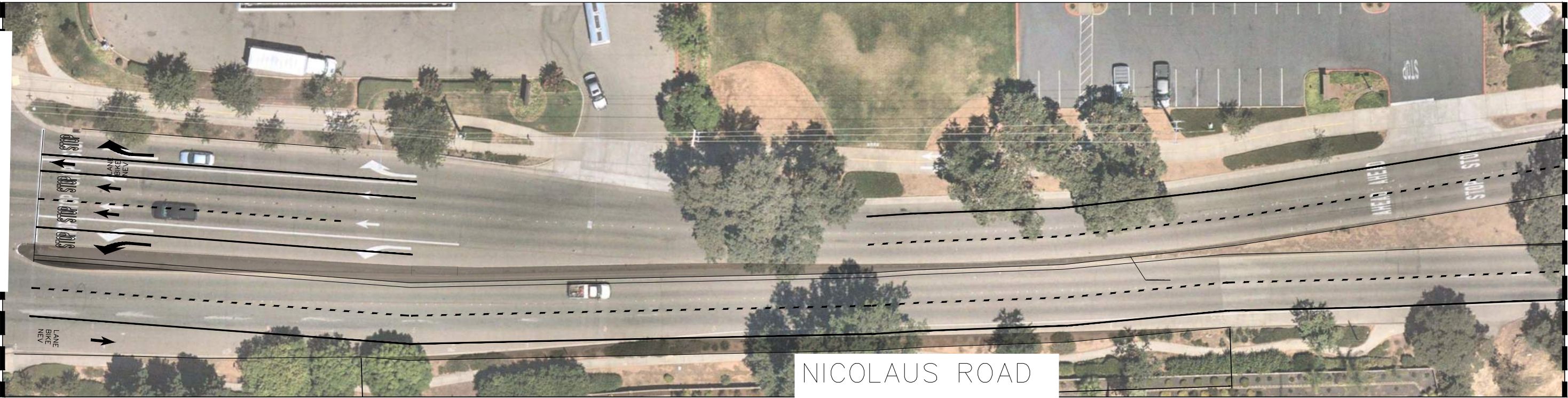
PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

NICOLAUS ROAD PHASE 1 NEV
IMPROVEMENTS PLAN LINE
CONCEPT EXHIBIT

SCALE 1" = 20'



LAKESIDE DRIVE



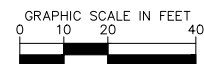
NICOLAUS ROAD

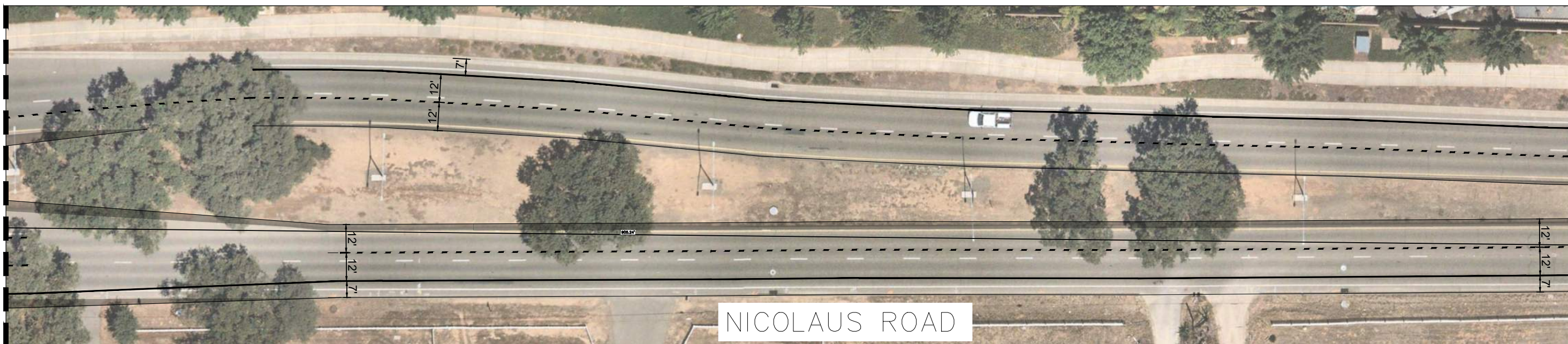
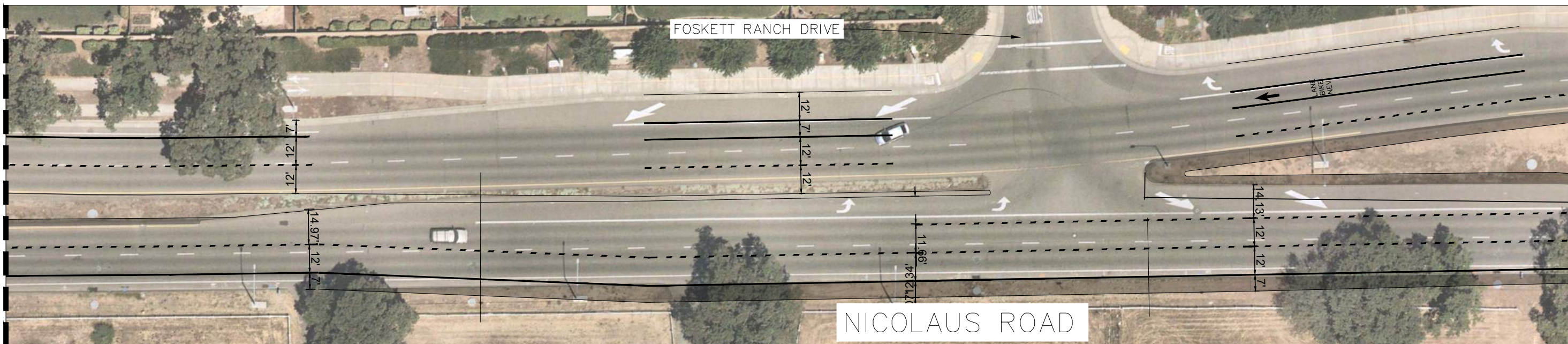


NICOLAUS ROAD

PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

NICOLAUS ROAD PHASE 1 NEV
IMPROVEMENTS PLAN LINE
CONCEPT EXHIBIT
SCALE 1" = 20'

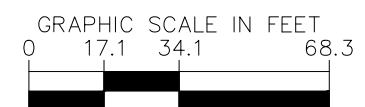


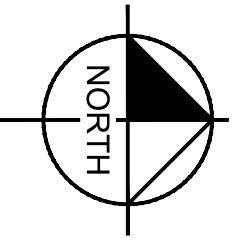


PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

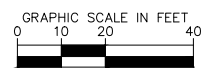
NICOLAUS ROAD PHASE 1 NEV
IMPROVEMENTS PLAN LINE
CONCEPT EXHIBIT

SCALE 1" = 20'





MCCOURTNEY RD IMPROVEMENTS FROM
BLACKSMITH AVE TO VIRGINIATOWN RD





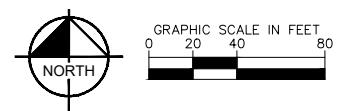
MCBEAN ROAD

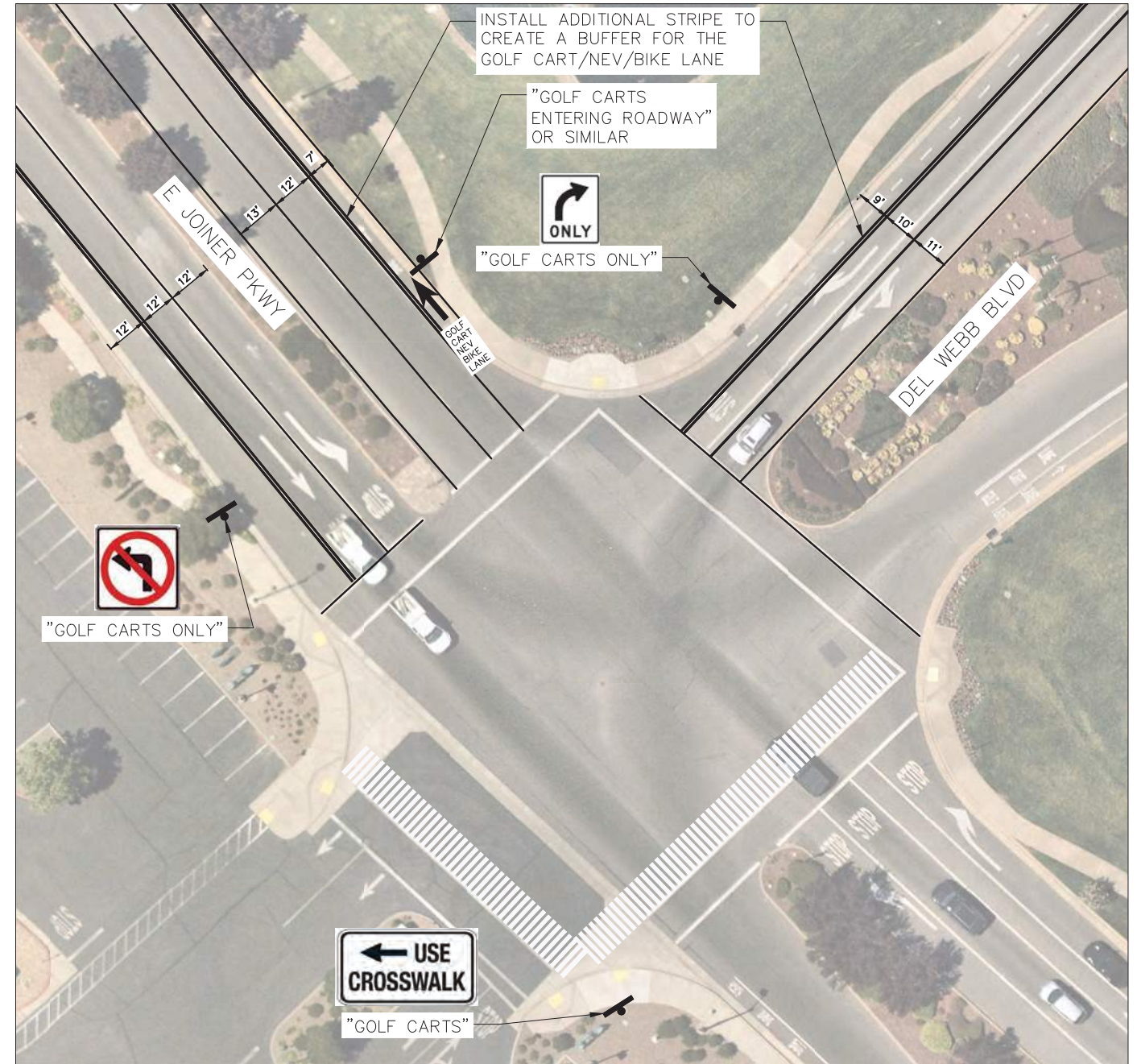
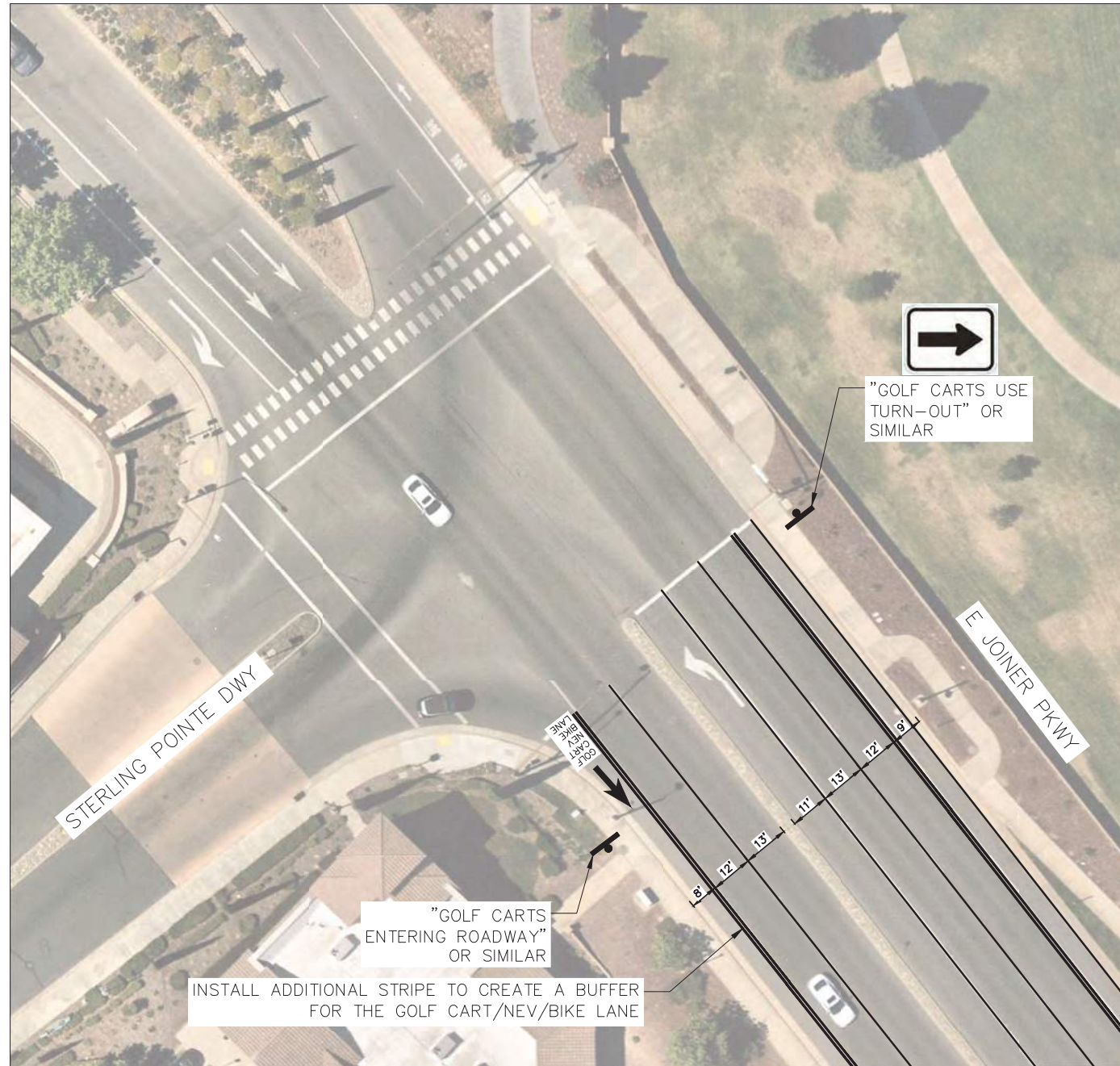
FERRARI RANCH ROAD

PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

MCBEAN ROAD PHASE 1 NEV
ROADWAY IMPROVEMENTS PLAN
LINE CONCEPT EXHIBIT

SCALE 1" = 40'

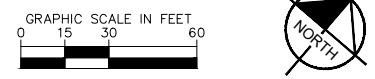
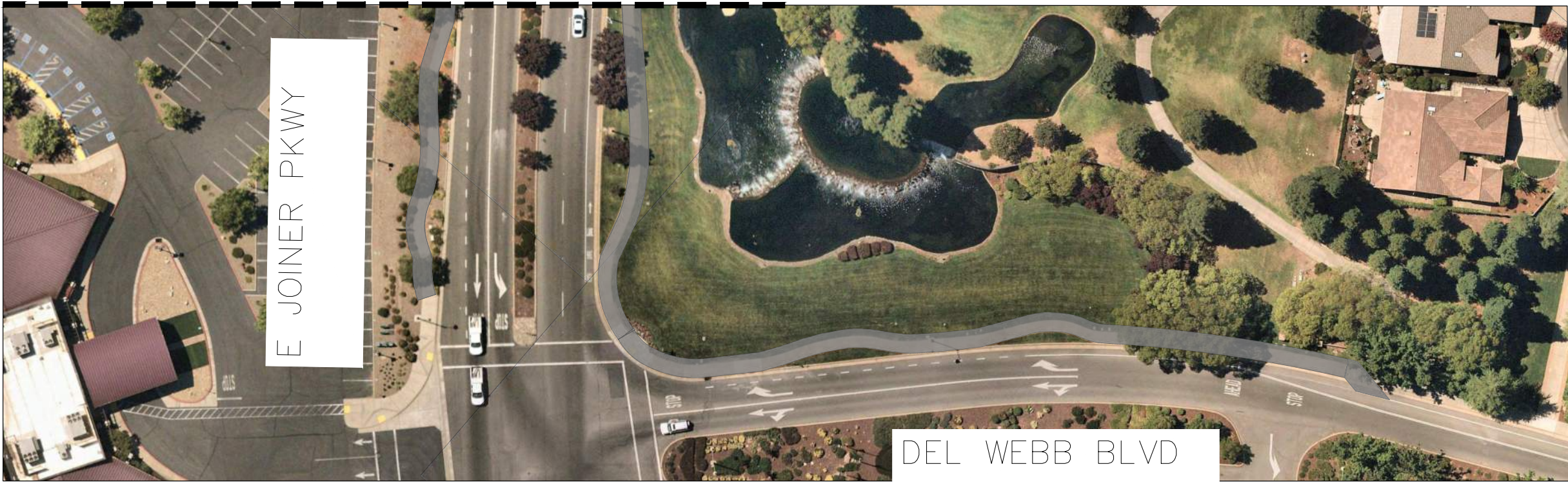
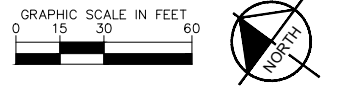
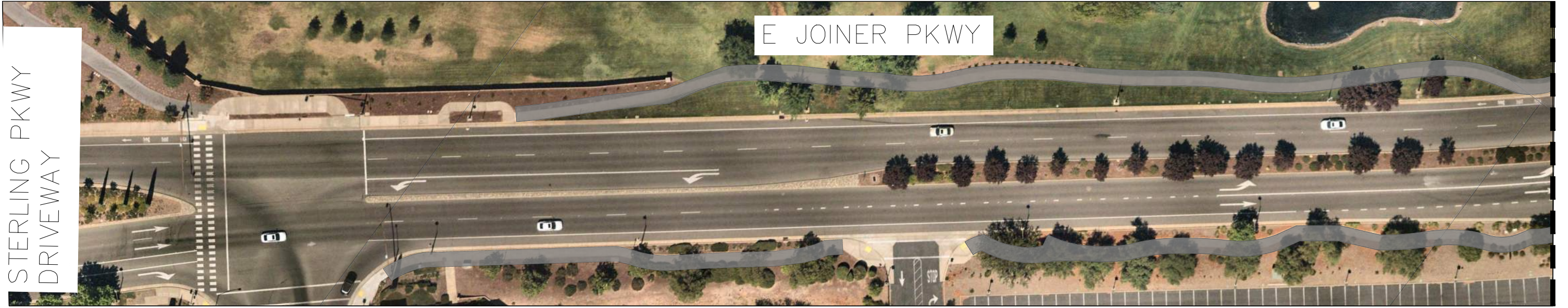




PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

E JOINER PKWY GOLF CART LANE
IMPROVEMENTS PLAN LINE
CONCEPT EXHIBIT

SCALE 1" = 30'



PRELIMINARY CONCEPT
NOT FOR CONSTRUCTION
SEPTEMBER 2022

E JOINER PKWY GOLF CART PATH
IMPROVEMENTS PLAN LINE
CONCEPT EXHIBIT

SCALE 1" = 30'



Appendix G

Opinions of Probable Construction Costs (OPCCs)

City of Lincoln
Ferrari Ranch Road NEV Lane Improvements

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$8,067.00	\$8,067
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$16,134.00	\$16,134
Signing and Striping					
5	THERMOPLASTIC STRIPING	27,400	LF	\$3.00	\$82,200
6	REMOVE STRIPING	27,400	LF	\$2.10	\$57,540
7	THERMOPLASTIC PAVEMENT MARKING	1,080	SF	\$5.00	\$5,400
8	ROADSIDE SIGN (NEW)	18	EA	\$400.00	\$7,200
Construction Subtotal					\$185,541
Contingency @ 10%					\$18,554
Estimated Construction Total					\$204,095

City of Lincoln
Nicolaus Road NEV Lane Improvements Stage 1 - Lakeside Drive to Joiner Parkway

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$26,348.95	\$26,349
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	PREPARE WATER POLLUTION CONTROL PROGRAM	1	LS	\$3,000.00	\$3,000
5	JOBSITE MANAGEMENT (10%)	1	LS	\$10,000.00	\$10,000
6	CLEARING AND GRUBBING	1	LS	\$3,000.00	\$3,000
7	MODIFY EXISTING IRRIGATION SYSTEM	1	LS	\$5,000.00	\$5,000
8	RECONSTRUCT INLET	1	EA	\$3,000.00	\$3,000
9	REMOVE STRIPING	19,350	LF	\$1.50	\$29,025
10	REMOVE CONCRETE (CURB, GUTTER, AND SIDEWALK)	3,176	LF	\$50.00	\$158,800
11	ROADWAY WIDENING (5.5" HMA / 20.5" AB)	11,574	SF	\$11.00	\$127,314
12	MINOR CONCRETE (TYPE 2 CURB & GUTTER)	3,176	LF	\$40.00	\$127,040
Signing and Striping					
13	THERMOPLASTIC STRIPING	19,350	LF	\$3.00	\$58,050
14	THERMOPLASTIC PAVEMENT MARKING	430	SF	\$5.00	\$2,150
15	ROADSIDE SIGN (NEW)	4	EA	\$400.00	\$1,600
Construction Subtotal					\$563,328
Contingency @ 10%					\$56,333
Estimated Construction Total					\$619,661

City of Lincoln
Nicolaus Road NEV Lane Improvements Stage 2 - Aviation Blvd to Lakeside Drive

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$27,455.80	\$27,456
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	PREPARE WATER POLLUTION CONTROL PROGRAM	1	LS	\$3,000.00	\$3,000
5	JOBSITE MANAGEMENT (10%)	1	LS	\$54,911.60	\$54,912
6	CLEARING AND GRUBBING	1	LS	\$3,000.00	\$3,000
7	MODIFY EXISTING IRRIGATION SYSTEM	1	LS	\$5,000.00	\$5,000
8	RECONSTRUCT INLET	1	EA	\$3,000.00	\$3,000
9	REMOVE STRIPING	7,050	LF	\$1.50	\$10,575
10	REMOVE CONCRETE (CURB, GUTTER, AND SIDEWALK)	4,349	LF	\$50.00	\$217,450
11	ROADWAY WIDENING (5.5" HMA / 20.5" AB)	9,021	SF	\$11.00	\$99,231
12	MINOR CONCRETE (TYPE 2 CURB & GUTTER)	4,349	LF	\$40.00	\$173,960
Signing and Striping					
13	THERMOPLASTIC STRIPING	7,050	LF	\$3.00	\$21,150
14	THERMOPLASTIC PAVEMENT MARKING	430	SF	\$5.00	\$2,150
15	ROADSIDE SIGN (NEW)	4	EA	\$400.00	\$1,600
Construction Subtotal					\$631,483
Contingency @ 10%					\$63,148
Estimated Construction Total					\$694,632

City of Lincoln
McCourtney Road NEV Lane Improvements

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$704.00	\$704
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$1,408.00	\$1,408
Signing and Striping					
5	THERMOPLASTIC STRIPING	1,000	LF	\$3.00	\$3,000
6	THERMOPLASTIC PAVEMENT MARKING	336	SF	\$5.00	\$1,680
7	ROADSIDE SIGN (NEW)	1	EA	\$400.00	\$400
Construction Subtotal					\$16,192
Contingency @ 10%					\$1,619
Estimated Construction Total					\$17,811

City of Lincoln
Twelve Bridges Main Village NEV Lane Improvements

*Opinion of Probable Construction Costs Proposed Design -
 February 2023*

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$612.00	\$612
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$1,224.00	\$1,224
Signing and Striping					
5	THERMOPLASTIC PAVEMENT MARKING	8	SF	\$5.00	\$40
6	ROADSIDE SIGN (NEW)	8	EA	\$400.00	\$3,200
Construction Subtotal					\$3,240
Contingency @ 10%					\$324
Estimated Construction Total					\$3,564

City of Lincoln
Sterling Pkwy NEV Lane Improvements

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$2,608.42	\$2,608
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$5,216.84	\$5,217
Signing and Striping					
5	THERMOPLASTIC STRIPING	6,400	LF	\$3.00	\$19,200
6	REMOVE STRIPING	6,400	LF	\$2.10	\$13,440
7	THERMOPLASTIC PAVEMENT MARKING	688	SF	\$5.00	\$3,440
8	ROADSIDE SIGN (NEW)	2	EA	\$400.00	\$800
Construction Subtotal					\$36,880
Contingency @ 10%					\$3,688
Estimated Construction Total					\$40,568

City of Lincoln

McBean Park Drive NEV Lane Improvements Phase 1 - East Avenue to Ferrari Ranch Road

Opinion of Probable Construction Costs

Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$532.00	\$532
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$1,064.00	\$1,064
Signing and Striping					
5	THERMOPLASTIC PAVEMENT MARKING	168	SF	\$5.00	\$840
6	ROADSIDE SIGN (NEW)	2	EA	\$400.00	\$800
Construction Subtotal					\$1,640
Contingency @ 10%					\$164
Estimated Construction Total					\$1,804

City of Lincoln

McBean Park Drive NEV Lane Improvements Phase 2 - Ferrari Ranch Road to Stardust Lane

Opinion of Probable Construction Costs

Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$1,030.00	\$1,030
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$2,060.00	\$2,060
Signing and Striping					
5	THERMOPLASTIC PAVEMENT MARKING	840	SF	\$5.00	\$4,200
6	ROADSIDE SIGN (NEW)	4	EA	\$400.00	\$1,600
Construction Subtotal					\$5,800
Contingency @ 10%					\$580
Estimated Construction Total					\$6,380

City of Lincoln
Downtown NEV Lane Improvements

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$672.50	\$673
Signing and Striping					
2	ROADSIDE SIGN (NEW)	29	EA	\$450.00	\$13,050
3	RELOCATE ROADSIDE SIGN	1	EA	\$400.00	\$400
Construction Subtotal					\$14,123
Contingency @ 10%					\$1,412
Estimated Construction Total					\$15,535

City of Lincoln
East Joiner Pkwy Golf Cart Lane Improvements

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$1,089.50	\$1,090
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$2,179.00	\$2,179
Signing and Striping					
5	THERMOPLASTIC PAVEMENT MARKING	200	SF	\$5.00	\$1,000
6	THERMOPLASTIC STRIPING	2,500	LF	\$3.00	\$7,500
7	REMOVE STRIPING	900	LF	\$2.10	\$1,890
8	ROADSIDE SIGN (NEW)	6	EA	\$400.00	\$2,400
Construction Subtotal					\$25,059
Contingency @ 10%					\$2,506
Estimated Construction Total					\$27,564

City of Lincoln
East Joiner Pkwy Golf Cart Path Improvements

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$40,669.65	\$40,670
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	PREPARE WATER POLLUTION CONTROL PROGRAM	1	LS	\$3,000.00	\$3,000
5	JOBSITE MANAGEMENT (10%)	1	LS	\$81,339.30	\$81,339
6	CLEARING AND GRUBBING	1	LS	\$3,000.00	\$3,000
7	REMOVE TREE	11	EA	\$500.00	\$5,500
8	REMOVE CONCRETE (CURB, GUTTER, AND SIDEWALK)	10,940	LF	\$50.00	\$547,000
9	MINOR CONCRETE (SIDEWALK)	22,263	SF	\$10.00	\$222,630
10	CURB RETURN RAMP	2	LS	\$10,000.00	\$20,000
Signing and Striping					
11	THERMOPLASTIC PAVEMENT MARKING	172	SF	\$5.00	\$860
12	ROADSIDE SIGN (NEW)	2	EA	\$400.00	\$800
13	RELOCATE SIGN	8	EA	\$200.00	\$1,600
Utilities					
14	RELOCATE UTILITIES	2	LS	\$20,000.00	\$40,000
Construction Subtotal					\$975,399
Contingency @ 10%					\$97,540
Estimated Construction Total					\$1,072,939

City of Lincoln
Golf Cart Loop installation at E Joiner Pkwy at Del Webb Blvd/Bella Breeze Dr

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Utilities					
1	MOBILIZATION (5%)	1	LS	\$758.00	\$758
2	CONSTRUCTION STAKING	1	LS	\$4,000.00	\$4,000
3	TRAFFIC CONTROL SYSTEM	1	LS	\$5,000.00	\$5,000
4	JOBSITE MANAGEMENT (10%)	1	LS	\$1,516.00	\$1,516
5	DETECTOR LEAD-IN CABLE	360	LF	\$6.00	\$2,160
6	INSTALL LOOPS	2	LS	\$2,000.00	\$4,000
Construction Subtotal					\$17,434
Contingency @ 10%					\$1,743
Estimated Construction Total					\$19,177

City of Lincoln
Golf Cart Misc Signage

Opinion of Probable Construction Costs
Proposed Design - February 2023

Item	Description	Estimated Quantity	Unit	Unit Price	Total
Civil/Roadway					
1	MOBILIZATION (5%)	1	LS	\$202.50	\$203
Signing and Striping					
2	ROADSIDE SIGN (NEW)	9	EA	\$450.00	\$4,050
Construction Subtotal					\$4,253
Contingency @ 10%					\$425
Estimated Construction Total					\$4,678



CONTACT

ROLAND NEUFELD

Senior Engineer, City of Lincoln

✉ Email: Roland.Neufeld@LincolnCA.gov

☎ Office: 916.434.2481



600 Sixth Street
Lincoln, CA 95648